DOCUMENT RESUME

ED 047 181 AA 000 674

TITLE	Objectives for Fort Lincoln Elementary School, Washington, D.C. Fort Lincoln New Town Education System.
INSTITUTION	General Learning Corp., Washington, D.C.
SPONS AGENCY	District of Columbia Public Schools, Washington, D.C.
PUB DATE	6 Apr 70
NOTE	193p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$6.58
DESCRIPTORS	*Behavioral Objectives, *Educational Objectives, *Elementary Schools, Health, *Mathematics, Programs, *Reading, Urban Studies
IDENTIFIERS	*Fort Lincoln New Town (FLNT)

ABSTRACT

These behavioral objectives were developed for use at Fort Lincoln elementary school to be built in Washington, D.C. as part of the public school system. In many cases existing objectives were edited and adapted. Sources of these objectives include the Individualized Programed Instruction (IPI) reading and math curriculums developed at the University of Pittsburgh, the Discovery Program in basic skills designed by Universal Education Corporation and Learning Research Associates, and the elementary science program formulated by the American Association for the Advancement of Science. The organization of the objectives varies from one subject to another depending on the source. Most commonly each subject is numbered independently beginning with one. The intermediate objectives with the exception of math and reading are indicated by decimal numbers. Certain minimum objectives required for completion of the Fort Lincoln program have been specified. Some closely related objectives are cross-referenced with the related objectives noted in parentheses. (For related documents see ED 047 171 through ED 047 188.) (Author)

ED 047 181

AA 000 674

GENERAL LEARNING CORPORATION
EDUCATIONAL SERVICES DIVISION

Objectives for

Fort Lincoln Elementary School

Washington, D. C.

April 6, 1970

Educational Services Division
General Learning Corporation
5454 Wisconsin Avenue
Washington, D. C. 20015

Introduction
for
Terminal and Intermediate Objectives

These behavioral objectives were developed for use at Fort Lincoln elementary school to be built in Washington, D.C. as part of the public school system. In many cases existing objectives were edited and adapted. Sources of these objectives include the IPI reading and math curriculums developed at the University of Pittsburgh, the Discovery Program in basic skills designed by Universal Education Corporation and Learning Research Associates, and the elementary science program formulated by the American Association for the Advancement of Science.

The organization of the objectives varies from one subject to another depending on the source. Most commonly each subject is numbered independently beginning with one. The intermediate objectives with the exception of math and reading are indicated by decimal numbers. The objectives do not necessarily appear in order of difficulty (except for IPI math and reading) but rather are grouped under general themes or by related topics in each subject area.

Certain minimum objectives required for completion of the Fort Lincoln program have been specified. In reading and math they are underlined and the number of the corresponding IPI objective follows in parentheses; in communication skills they are asterisked.

Some closely related objectives are cross-referenced with the related objective noted in parentheses.

TERMINAL OBJECTIVES

Discovery

Required — Reading, Communication Skills, Mathematics, and Health

Optional — Sciences, Social Studies, Arts and Humanities, and Physical Education

Note: Objectives are numbered consecutively beginning at 1 for each subject matter area with the exception of science.

Discovery*

Observing

1. Recognizes objects and pictures that are the same and those that are different.

Listening

2. Identifies familiar sounds and responds to sounds or to oral instruction.

Expanding Vocabulary

3. Names familiar objects or actions and uses descriptive words.

Improving Memory

4. Recalls visual and verbal patterns and memorizes simple verses and poems.

Recognizing Characteristics

5. Describes physical and abstract characteristics of an object or picture of an object.

Classifying

6. Classifies objects by one or more characteristics.

Solving Problems

7. Seeks relevant information to solve problems, plans strategy for games or problems, attacks a problem rationally or systematically, and anticipates future events in a series based upon past events.

Predicting and Testing

8. Predicts results of an occurrence on the basis of given information and tests predictions.

Touching

9. Identifies or describes object by touch.

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*The objectives were developed at Universal Education Corporation by Bert Freilich, Fran Klagsbrun, Ron Ray, George Silverman, Tom Verhave, and David Whitney.

Understanding Shapes

10. Identifies and names the basic shapes.

Knowing Color

11. Identifies and names the colors.

Speaking

12. Speaks so that he can be understood and can answer simple questions in sentences using various parts of speech.

Following Directions

13. Carries out a six to eight part verbal direction or performs an activity which requires six to eight actions.

Counting

14. Matches, identifies and prints numerals from 1 to 10. Counts from 1 to 10.

Understanding Numbers

15. Describes sets and members of sets; joins and separates sets; prints numerals.

Telling Time

16. Names basic units of time and reads time on a clock.

Measuring

17. Compares weights, volumes, temperatures, and distances.

Sticking to a Task

18. Persists 15 minutes at a task.

Understanding Rules

19. Makes and follows rules.

Tasting and Smelling

20. Compares tastes and smells of common items.

Finger Dexterity

21. Controls hand and finger movements, coordinates eyes and hands in a manipulating task.

Drawing

22. Describes what a drawing communicates, and draws using several media and tools.

Making and Building

23. Uses building materials in a variety of ways.

Using Tools

24. Demonstrates the ability to use a variety of tools.

Knowing the Alphabet

25. Names and prints all letters; reads own name.

Relations With Others

26. Demonstrates friendliness and respect for others and willingness to participate in relating to other children.

Self-Care and Safety

27. Demonstrates good health and safety practices in playing, eating, sleeping, and in moving about indoors and outdoors.

Understanding "What"

28. Identifies body parts, surrounding physical earth features, seasons, weather conditions, animal and vegetable life.

Understanding "Where"

29. Uses prepositions to describe where objects are and uses spatial clues to locate objects.

Understanding "When"

30. Estimates time and places events in a time sequence.

Understanding "Why"

31. Explains a cause behind a simple event or effect.

Understanding "How"

32. Observes and describes how two or more actions or occurrences relate after viewing a demonstration.

Understanding People

33. Describes how people differ in terms of physical features, personalities, roles in a family, places where they live, dress, occupations, hobbies, language, religion, and politics.

Making Sounds and Music

34. Reproduces vocal and instrumental sounds and rhythms.

Physical Coordination

35. Balances and controls gross motor activities.

Reading*

Decoding

1. Has a reading vocabulary of 7,000 - 10,000 words.

2. Sounds out and pronounces the written form of phonetically regular words in the student's speaking vocabulary.

3. Composes phonetically regular words which are in the student's speaking vocabulary.

4. Executes printed directions which meet a criterion of precision and clarity and which use words in the student's vocabulary

Vocabulary

5. Identifies the meaning of the follow[illegible] Greek and Latin roots and uses them to find the meaning of words and to build words.

   graph
   phono
   tel, tele
   auto

   cycle
   mono
   pol, poli
   syn

   dic
   ject
   scribe
   mov, mot
   rul

   uni
   fac
   spect
   cap
   vert

6. Forms new words which are part of the English language by adding the prefixes: non, un, mis, in, sub, circum, super, inter, trans, re, con, de, ex, pre, pro, ad, ob.

7. Given the following list of word endings, applies the correct form to a word in a sentence: ant, ent, ive, ic, ness, ment, ion, able, ible, ful, less, ous, ize, ify, ate, en, ty, th.

8. Identifies synonyms for specific words; may use thesaurus.

9. Identifies antonyms for specific words; may use thesaurus.

10. Chooses the correct homonyn (words pronounced alike but different in spelling and meaning) for a particular context.

11. Identifies the meaning of a homograph (words spelled alike but different in meaning) in context.

12. Identifies and uses word clues (like, such as, as) to attempt to figure out the meaning of a word in a sentence or selection.

13. Locates origins and histories of words by use of source books.

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* These objectives are derived from the IPI Reading curriculum developed by Learning Research and Development Center, University of Pittsburgh.

6-C

Comprehension

14. Answers factual questions requiring recall of details from an informative selection.

15. Reports on a book of the student's own selection, providing the following information: main idea or purpose, characterization, mood, and examples to support opinions or statements about the book -- the form of the report may be written or oral and may include art work.

16. Identifies the probable cause and effect relationships in selections in which the cause or the effect is stated or implied.

17. Describes the mood of a poem or essay and identifies some of the reasons, personal and technical, for the student's opinion.

18. Given statements, selects those which are inferences and those which are valid conclusions based on the evidence in a given selection.

19. Reads reports of an event in several different newspapers and/or magazines and describes the differences in reporting. States and explains his preference for one article.

20. Given a list of newspaper headlines and a short newspaper article, selects the headline which most closely describes the content of the article.

21. Locates the following information in a newspaper: weather report for the day, weather predictions for the next five days, list of community events, frequency with which the newspaper is printed, the cost of the newspaper, and the major sections of the paper.

22. Given a factual article and a title,states if the title is appropriate.

23. Classifies advertisements according to the type of propaganda used and provides evidence to support the selection of type of propaganda.

24. Writes a research paper using four sources after doing the preliminary work of making an outline, taking notes, and preparing a bibliography.

Library and Reference Skills

25. Finds the meaning, pronunciation and derivation of words as given in the dictionary.

26. Finds abbreviations, signs, symbols and biographical names for given terms by using the dictionary.

7-C

27. Finds books in the library through the use of the card catalog and/or the Dewey Decimal System.

28. Locates information within the book through use of the index.

29. Locates information on selected topics through the use of the Readers' Guide to Periodical Literature and/or the library catalog.

Communication Skills*

Writing

1. Writes original paragraphs consisting of grammatically correct sentences and appropriate conventions of punctuation.

2. Spells words used in original sentences correctly as the result of mastery of basic words in frequent use, phonetic principles, or use of a dictionary.

3. Gives directions, orally or in writing, to other students which the other students successfully execute. The directions are to be for a task which can be completed in 10 minutes, can be completed without cost to the students or school, and for which all subtasks included are in the repertoire of learnings of students who are to complete the task.

4. Types 30 words a minute with a maximum of two errors.

5. Judges student's own writing for selected criteria such as clarity, expression of a mood, and brevity, and revises sections judged to be deficient according to the selected criteria. Reviews revised version.

6. Judges the writing of an unidentified author for selected criteria such as clarity, expression of a mood, and brevity, and revises sections judged to be deficient according to the selected criteria.

Listening

7. Listens to a talk of up to 30 minutes and paraphrases, orally or in writing, two points that the speaker made.

8. Hears and executes 4 related, dependent, sequential, meaningful operations extending over at least 10 minutes when both the language and the operations are known to be in the student's repertoire; student may write down the directions if he chooses.

9. Listens to and relays a meaningful message when the content and language used in the message are known to be within the student's repertoire. Time delay of not more than five minutes.

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* A number of objectives grouped under communication skills, social studies and art forms require the student to state preferences. For these objectives the criterion measure is simply that the student discuss or state his preference. No score or grade will be given for the response.

11-C

Speaking

10. Uses the phone to gather information on selected topics: finds the correct phone number, places the call, follows socially effective procedures for requesting information, and obtains clarification of information that may not be clear.

11. Leads discussion among five students: focuses on the main topic, listens to ideas of others, summarizes main points, sees that all participants are included, and brings the discussion to a satisfactory conclusion. The criterion of success may be the leader's own satisfaction with all elements of the discussion given above, consensus of discussion members that the leader included all elements of the discussion listed above, or consensus of an audience (class of students, for instance) that the leader included all elements of the discussion listed above.

12. Negotiates with adults and/or students to obtain agreement on a topic or planned activity.

13. Prepares a questionnaire on a specific topic and uses it to conduct a 15 minute interview with an adult (a local businessman, community leader, school teacher) employing the following procedures: Makes an appointment for the interview, identifies himself at start of interview, states purpose of the interview, asks questions and records responses of interviewee, brings interview to close, thanks interviewee for cooperation, reports orally or in writing the results of the interview.

Observing

14. Draws a scene or makes a diagram which is recognizable at a later date to the student or to others, as a method of recording an observation.

15. From a group of pictures or diagrams representing an event or scene familiar to the student, selects those pictures which can be accepted as an accurate expression of reality and explains why these pictorial representations are acceptable and others are not.

16. From a group of pictures or diagrams representing an event not familiar to the student, selects the picture which can be accepted as probably accurate expression of reality. States a gross inference upon which the student decided to accept the picture or diagram as probably accurate.

17. From a series of film clips that relate an event witnessed by the student, selects the one which factually documents the event.

18. From a series of pictures, still or motion, makes inferences about the emotions represented in the pictures.

10-C

Mathematics *

Basic Operations

1. Counts aloud or in writing to one million from any starting point.

2. Converts decimal fractions to thousandths from common or mixed fractional form.

3. Orders a collection of pure and mixed decimal fractions. Decimal parts to thousandths. Whole numbers to one hundred.

4. Rounds numbers to nearest thousands, ten thousands, hundred thousands, and millions for estimating answers.

5. Writes the standard numeral for a five or more place number written in words and writes a five or more place number in words.

6. Identifies the place value of the thousands, ten thousands, hundred thousands and millions digit in numbers to one million by writing or selecting equivalent expressions.

7. Identifies the place value of digits in mixed decimal fractions to thousandths by writing or selecting equivalent expressions.

8. Adds with carrying for decimal numbers with whole number parts to thousands and decimal parts to thousandths for problems with two or more addends.

9. Subtracts two decimal numbers with whole number parts to thousands and decimal parts to the thousandths.

10. Multiplies two decimal numbers with whole number parts to thousands and decimal parts to thousandths.

11. Divides pure and mixed decimal numbers with whole number parts to thousands and decimal parts to thousandths in the divisor and dividend. Rounds last digit for specified degree of accuracy.

12. Writes the quotient for a division problem as a mixed number in lowest terms.

13. Uses fractional notation as another way of writing a division problem and solves division problems written as fractions.

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* These objectives are derived from the IPI Mathematics curriculum developed by Learning Research and Development Center, University of Pittsburgh.

2-C

14. Solves multiple-step word problems which have one or more of the following characteristics:

    a. Adding decimal numbers with whole number parts to thousands and decimal numbers to thousandths for problems involving two or more addends.

    b. Subtracting decimal numbers with whole number parts to thousands and decimal parts to thousandths.

    c. Multiplying two decimal numbers with whole number parts to thousands and decimal parts to thousandths.

    d. Dividing pure and mixed decimals with whole number parts to thousands and decimal parts to thousandths in the divisor and dividend.

    e. Performs the same operations with money values.

15. Finds percent of whole numbers.

16. Selects principle, including associate, commutative, distributive, and inverse for equations and expressions including skills learned to this point.

17. Solves simple word problems which require forming an algebraic equation with one unknown and solving for the unknown.

Application

18. Identifies common bills and coins and finds their value in numbers or in other coins.

19. Adds and subtracts units of time for problems which extend beyond 12:00; i.e., "Three hours later than 11:00 p.m. is 2:00 a.m."

20. Writes equivalent values for the following: decade, fortnight, score, and century.

21. Identifies four major time zones on a map of the U. S. and works problems which require zone changes.

22. Solves problems which involve a change between daylight saving and standard times. States the reason daylight savings time is used.

23. Identifies units of the calendar: days, weeks, and months. Solves problems using a calendar. Writes any given date as month, day, and year in numerals.

24. Reads a 12 hour clock.

25. Completes word problems involving two or three time units which require regrouping.

26. Weighs objects in grams and kilograms. Converts between grams and kilograms.

27. Solves problems involving conversions between the following measures when provided with a table of necessary equivalents:

    a. Metric and English weight measures to kilograms.

    b. Metric and English linear measures to kilometers.

    c. Acres, miles, and feet.

28. Solves problems involving up to three units of measure which require regrouping for the following:

    a. Tons, pounds, ounces.

    b. Gallons, quarts, pints, cups.

    c. Yards, feet, inches.

29. Reads speedometers and solves rate ($d = st$) problems.

30. Measures lines to the nearest inch and to the nearest centimeter and makes general comparisons.

31. Uses a square inch unit to find the areas of simple plane figures such as squares and rectangles.

32. Makes conversions among square units for units learned.

33. Finds perimeters for polygons by measuring as directed and finding formulas for perimeters of regular polygons.

34. Measures a line segment to the nearest 1/8 inch and 1/16 inch.

35. Writes ratio statements in fractional form and finds missing terms in a proportion.

36. Converts fractions and decimals to percents and vice versa.

37. Completes patterns for "what's my rule?" games and solves simple function problems by finding "the rule."

38. Reads and makes graphs and charts, including bar graphs and line graphs with decimals.

3-C

39. Writes Roman numerals for numbers to 500 and vice versa.

40. Determines distances from simple maps with conversion factors given in feet per inch, yards per inch or miles per inch. Accuracy to 1/4 inch.

5-C

Health

1. Identifies any safety hazards in a series of displays of storage of household objects, use of household appliances, use of tools at home and in common occupations, and traffic situations.

2. Alters display of situation with safety hazard to remove the hazard or make the situation safer.

3. Cleans out simple cuts and puts corrective medication on them.

4. Demonstrates knowledge of principles of disease prevention by washing hands before eating and after using the toilet and brushing his teeth in the prescribed manner.

5. Cares for colds and other simple ailments as recommended by the school nurse.

6. Identifies symptoms of common diseases.

7. Keeps a record of food intake for five consecutive days, estimating quantity. Selects an average day's intake. Compares it against recommended standards for adequate daily intake (basic food groups, vitamins, calories) for a person of his age, height, weight, and sex. Notes any deficiencies and makes a plan to correct them.

8. Given a diagram of the human body showing major organs and anatomical structures (male and female) and a list of correct terms for body parts, labels the diagram with 85 percent accuracy.

9. With no more than three other students, gathers data and prepares a presentation (graphic, written, oral, or a combination) on one of the following: tobacco, alcohol, an illegal drug (marijuana, narcotics, LSD). The presentation should cover such topics as origin of its use by human beings, various forms in which it is consumed, its effect on the body, attitudes of society toward its use. This presentation may be given to other students and teachers in the school and/or parents and other invited guests.

10. With a group of no more than three other students, selects a common type of patent medicine (laxative, headache remedy, sedative, antacid, vitamin, cold remedy, etc.), collects advertisements from television, radio, magazines, newspapers, billboards for two or three brand name products in the chosen category and locates scientific evidence to support or refute the claims made about the product and its efficacy in treating common ailments.

The science objectives from AAAS (Science-A Process Approach) are included here for grades K through 3. The final edition for grades 4 through 6 are currently in printing and are available from Xerox Corporation.

Science *

Observing

OB 1	Identifying and naming the primary and secondary colors.
OB 2a	Identifying and naming the size of an object in terms of large and small.
OB 2b	Identifying and naming the texture of an object in terms of smooth and rough.
OB 2c	Identifying and naming two or more characteristics of an object, such as color, size, shape, and texture.
OB 2d	Describing two or more characteristics of an object such as color, size, shape and texture.
OB 3	Distinguishing between temperature in two or more places at two or more times, using a coded thermometer.
OB 4	Distinguishing between two sounds in terms of volume, duration, and pitch.
OB 5	Identifying and naming color changes.
OB 6a	Identifying and naming objects that are solids and those that are liquids.
OB 6b	Identifying and naming changes in such characteristics as temperature, size, shape, and color observed in solid-liquid changes.
OB 6c	Distinguishing between solid objects that melt and those that do not melt, under specified conditions.
OB 7	Identifying objects in terms of similar and different odors.
OB 8a	Distinguishing two food tastes as alike or different.
OB 8b	Identifying and naming the taste of objects as sweet, sour, or salty.
OB 9	Identifying objects or changes in objects, using several of the senses.
OB 10a	Demonstrating a procedure for finding the temperature in degrees Celsius.
OB 10b	Demonstrating the use of a chart to record weather conditions.
OB 10c	Distinguishing between the changes in weather conditions on two days, given the two weather chart recordings.
OB 11a	Describing the changes observed when a magnet is brought into contact with material that is attracted by a magnet and material that is not.

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*These objectives are derived from Science -- A Process Approach. American Association for the Advancement of Science: Miscellaneous Publication 67-11. Level is grades one to three.

OB 11b	Identifying an object of any shape or size as being a possible magnet.
OB 11c	Distinguishing between objects that are magnets and those that are not magnets.
OB 12a	Describing observed color changes in objects that occur within a short time.
OB 12b	Stating that observed color changes occurred when another substance was added.
OB 13	Describing a growing mold in terms of various characteristics such as color, length, and shape.
OB 14a	Identifying the parts of the body that push and enable various animals to change their positions.
OB 14b	Demonstrating how a push in a given direction will effect a change in position of an animal or an object.
OB 15a	Identifying the stimulus and the response in the observed behavior of animals.
OB 15b	Describing a behavior in terms of stimulus and response.

Space/Time

ST 1	Identifying and naming common two-dimensional shapes: triangle, circle, square, ellipse, and rectangle.
ST 2	Identifying and naming movements of one's own body in the directions up, down, forward, back, left, and right.
ST 3a	Identifying objects as moving or not moving.
ST 3b	Distinguishing between and naming the directions up, down, forward, back, left and right with respect to objects.
ST 4	Constructing spatial arrangements of objects from pictures and diagrams.
ST 5a	Identifying and naming common three-dimensional shapes: cone, cylinder, sphere, cube, and pyramid.
ST 5b	Identifying and naming common two-dimensional shapes that are components of common three-dimensional shapes.
ST 6a	Identifying and naming the day of the week.
ST 6b	Identifying the number of days before or after familiar events, using a calendar.
ST 6c	Distinguishing time required to perform familiar activities in terms of clock intervals.

ST 7a	Demonstrating symmetry by folding.
ST 7b	Identifying objects which have line or plane symmetry.
ST 7c	Demonstrating that an object may be folded in more than one way to produce matching halves.
ST 8a	Identifying bilateral symmetry in animals.
ST 8b	Describing common environmental objects in terms of common two- and three-dimensional shapes.
ST 9a	Identifying the two-dimensional projections of common environmental three-dimensional objects.
ST 9b	Identifying common environmental three-dimensional objects, given their two-dimensional projections.
ST 10a	Identifying and naming angles.
ST 10b	Demonstrating the relative sizes of two angles by super-position.
ST 10c	Demonstrating movement in a given angular direction.
ST 11a	Distinguishing activities on the basis of performance time, as measured by various devices.
ST 11b	Distinguishing between short time intervals (minutes or seconds) by using a time-measuring device.
ST 12a	Identifying and naming the number of days before or after a particular event, using a calendar.
ST 12b	Identifying and naming the number of hours before or after a particular event, using a clock.
ST 12c	Naming the time from a clock to the nearest five minutes.
ST 13a	Distinguishing between and naming a straight path and a curved path.
ST 13b	Distinguishing between and naming edges in the environment as straight or curved and surfaces as flat or not flat.
ST 13c	Distinguishing between straight and curved paths on the surfaces of regular three-dimensional shapes, and identifying the shortest path.
ST 13d	Demonstrating a test for determining whether a surface is flat or not flat.

Numbers

N 1a	Identifying sets and their members.
N 1b	Identifying and naming, by means of one-to-one correspondence, sets that contain the same number of members.
N 2	Ordering collections of objects from greatest to least according to the numbers of objects in each.
N 3a	Identifying and naming the ordinal position of an object or event in a collection of at least five objects or events.
N 3b	Identifying and naming the ordinal relationship between any two or more of the counting numbers one to five.
N 4	Identifying and naming the number of members in a set with zero to twelve members.
N 5	Identifying and naming the ordinal positions on the number line of the integers between positive ten and negative ten.
N 6a	Naming the written symbol "+" as "and" or "plus"
N 6b	Naming the number ten with the written symbol "t".
N 6c	Identifying and naming the number names for the whole numbers zero to ninety-nine.
N 7a	Naming the written symbol "=" as "is another name for" or "equals".
N 7b	Describing the join process by oral number sentences such as "the sum of two and five is seven".
N 7c	Describing the join process by written number sentences, such as " 2 + 5 = 7".
N 7d	Demonstrating a procedure for finding the sum of any two whole numbers the sum of which does not exceed ninety-nine.
N 8a	Ordering negative integers between negative one and negative ten in terms of "one more than" and "one less than".
N 8b	Demonstrating a procedure for using the number line to find the sum of any two integers between negative ten and positive ten.
N 9	Demonstrating a procedure for finding the product of any two whole numbers from zero to ninety-nine the product of which does not exceed ninety-nine.

Measuring

M 1a	Distinguishing the relative length of two objects by superposition.
M 1b	Ordering lengths from the shortest to the longest.
M 2a	Ordering lengths by comparison with an agreed-upon scale.
M 2b	Demonstrating a procedure for finding the length of an object in units on an agreed-upon scale.
M 3a	Ordering containers by volume when relative volumes can be distinguished by inspection.
M 3b	Demonstrating a procedure for comparing volumes of containers in terms of unit volumes required to fill each container.
M 3c	Ordering three or more containers of various shapes by volume comparison with an agreed-upon unit.
M 4	Demonstrating a procedure for finding the length of an object in centimeters, decimeters, or meters.
M 5a	Distinguishing the relative weight of objects by lifting.
M 5b	Demonstrating a procedure for comparing small objects using arbitrary units and an equal-arm balance and describing the results.
M 5c	Ordering objects by making comparisons using an equal-arm balance.
M 6a	Distinguishing the relative area of two or more objects by super-position.
M 6b	Identifying a square and a rectangle as possible agreed-upon units of area.
M 6c	Identifying a square region as the agreed-upon unit of area resulting in the least error of area measurement.
M 6d	Demonstrating a procedure for finding the area of a plane figure in units of an agreed-upon area.
M 6e	Ordering groups of plane (two-dimensional) figures on the basis of area.
M 7	Constructing a table of the measured changes in seeds and seed sprouts.
M 8a	Describing a stationary object by stating that the forces acting on it are in balance.

M 8b	Describing an increase in the length of a stretched spring as a result of an increase in the force acting on the spring.
M 8c	Demonstrating a procedure for finding the weight of an object with a spring scale.
M 9	Applying a rule for estimating the lengths of common environmental objects and naming the estimated lengths in metric units.
M 10	Demonstrating a procedure for determining the actual size of objects, given both the representation of the object and its scale.
M 11a	Identifying and naming the temperature in degrees in Celsius, Fahrenheit, or arbitrary temperature scale units.
M 11b	Naming the freezing and boiling points of water as well as approximate normal body temperature in units of various systems.
M 12a	Demonstrating a procedure for finding the volume of a liquid and naming the volume in standard metric units.

Classifying

CL 1a	Identifying and naming properties or characteristics on which to base a single stage classification system.
CL 1b	Constructing and demonstrating the use of a single stage system for classifying common objects differing in several characteristics.
CL 2	Constructing and demonstrating the use of two distinct single-stage systems for classifying objects differing in several characteristics or properties.
CL 3	Constructing and demonstrating the use of a single-stage system for classifying pictures of various animals.
CL 4a	Identifying and naming at least one characteristic of living and non-living things.
CL 4b	Constructing and demonstrating the use of a single-stage system for classifying living and non-living things in an aquarium.
CL 5	Identifying and naming variations among objects or organisms which have many features in common.
CL 6	Constructing and demonstrating the use of a multistage system for classifying common plants and animals.
CL 7a	Distinguishing among solids, liquids, and gases.

CL 7b	Constructing and demonstrating the use of a system for classifying substances that are solids, liquids, or gases.
CL 8	Constructing and demonstrating the use of an order arrangement as a system for classifying colors.
CL 9a	Constructing and demonstrating the use of a method for separating a mixture of solids.
CL 9b	Demonstrating the use of a method for separating the components of a mixture and ordering them by volume or weight.

Communicating

CO 1a	Distinguishing between collections of information about an object that are sufficient and those that are not sufficient to permit identification of the object.
CO 1b	Describing enough properties of an object to enable another person to identify the object.
CO 2a	Constructing a bar of appropriate height on a bar graph to represent the number of a given set of objects.
CO 2b	Identifying and naming the number of items represented by a bar on a bar graph.
CO 3a	Describing physical changes in an object in terms of characteristics such as color, shape, texture, sound, length, surface area, and volume.
CO 3b	Describing characteristics of an object that remain unchanged while other characteristics are changing.
CO 4	Describing the observed changes in two colliding objects in terms of speed, weight, and distance moved.
CO 5a	Describing and ordering the observed changes in a plant.
CO 5b	Describing the direction of motion and the rate of change of the motion of parts of the plant which respond to the stimulus.
CO 6a	Describing the number of living things found in a given area and the observed frequency of various characteristics.
CO 6b	Describing characteristics of living objects as they develop, and the changes observed from one stage to another.
CO 7a	Identifying and naming the axes of a bar graph, given the data to be graphed.

CO 7b	Constructing a bar graph from a frequency distribution, and a frequency distribution from a bar graph.
CO 7c	Distinguishing between the number of items represented by two or more bars on a bar graph in terms such as more than, fewer than, the same number as, most, fewest.
CO 8a	Describing a sequence of procedures for testing conditions that affect plant growth.
CO 8b	Describing the observed results of carrying out a procedure for testing conditions that affect plant growth.
CO 9	Describing the changes in length and direction of an object's shadow, given line segment-and-angle drawings of the shadow.

Predicting

P 1	Constructing a prediction based on data presented on a graph.
P 2	Constructing predictions based on bar graphs and on data the children have recorded.

Inferring

I 1a	Distinguishing between statements of observation and statements that are plausible explanations.
I 1b	Identifying statements that are inferences.
I 2a	Identifying observations that support an inference.
I 2b	Distinguishing between inferences that account for all of the stated observations and inferences that do not.

Social Studies

Basic Goals

The social studies curriculum should prepare a student who will be able to:

Relate to the world around him through knowledge, awareness, and understanding of:

- his own feelings, needs, goals.
- his relationship to the physical environment.
- his family, its individual members, and the interactions among them.
- the political, economical, and social organization of his community and his nation.
- people of other cultures and nations.
- the unity, humanity, and interdependence of all mankind.

Control his destiny through mastery of his social and physical environment and use of rational thought processes.

Appreciate the basic democratic values of our society and participate in the democratic processes of the community and nation.

Choose a career from which he will derive satisfaction and use his abilities to their fullest extent.

Use his leisure time fruitfully.

Recognize and appreciate the tools and techniques of social scientists and their contributions to society.

Select and purchase consumer items wisely.

Appreciate the techniques and products of aesthetic and creative expression of his own and other cultures.

Concepts or Themes

This list of basic concepts represents a composite of what scholars, researchers, and curriculum developers regard as the central concepts for the substantive aspects of the social studies. Most of these concepts cut across disciplinary lines. It is these basic concepts which should form the core of the curriculum and be repeated and developed in depth from grade to grade.

- Conflict
- Urbanization
- Power
- Scarcity
- Specialization (division of labor, production, distribution)
- Interdependence
- Market
- Modified market economy
- Culture
- Values
- Communication
- Social change
- Social control
- Institutions
- Region and habitat
- Interaction
- Differences

In choosing a curriculum for the elementary social studies program, a number of criteria should guide the choice of content. To the greatest extent possible, the material should:

1. Fulfill the goals of the school program and the social studies program in enabling the student to become the sort of individual and citizen the system has determined it hopes to produce.

2. Fit together in a sequence of instruction so that one experience leads to and builds on another.

3. Lead to continuity of instruction through the use, repetition, and continual enlargement of a few organizing concepts and generalizations.

4. Permit interaction of the social studies program with other disciplines.

5. Create a balance of social studies topics (between local, national, and world-wide issues) and a balanced view of the social studies disciplines.

6. Be available or readily produced.

7. Relate to the experience, interests, and problems of the learners.

8. Permit a depth study using a comparative method.

The social studies objectives are divided into three sections: values, general skills, and knowledge. The objectives are numbered consecutively beginning with "1" as are the objectives of other subjects.

The values are expressed as attitudes or beliefs the student has toward himself, toward other individuals, and toward groups. Following each value is an incomplete list of behaviors which may indicate that the student does have the desired value. The list of behaviors could be expanded and used by the teacher as a checklist to assess the degree to which the student has learned a particular value or attitude. If a student exhibits few or no behaviors relating to a particular value, the teacher may wish to prescribe activities to encourage its development.

The objectives under general skills describe those behaviors which demonstrate ability to locate, collect, organize, evaluate, analyze, understand, and present information; to interpret statistical data and maps; to understand and use time concepts; and to work independently and in groups and to relate to others. Social studies objectives that overlap in other subject matter areas such as mathematics, reading, and communications skills are followed by a reference to the specific objective they overlap.

Objectives related to concepts, facts, processes, and relationships in social studies are contained in the section headed knowledge. The number of each objective is followed by a letter representing the appropriate discipline as follows:

G = Geography
H = History
E = Economics
P = Politics and Government
A = Anthropology
S = Sociology
Psy = Psychology

Frequently, an objective encompasses knowledge related to more than one social studies discipline. In such cases, letters representing all related disciplines follow the number of the objective, with the predominate discipline listed first.

Values

1. Respects himself as inferred from behavior such as the following:

   - Is on time to school and appointments.
   - Attends school regularly.
   - Is neat and clean in personal appearance.
   - When addressed by others, responds audibly and clearly.
   - Volunteers to answer questions, participate in activities, and accept responsibility.
   - When given a mirror, looks himself in the eye.
   - Seeks professional assistance when it is needed (goes to school doctor or dentist for illness or dental correction).
   - Voluntarily displays a painting or creative product he has made.
   - When asked to evaluate his own character and abilities is able to say good things about himself.
   - In answering a questionnaire about himself and others in terms of skills, abilities, and character, his self-evaluation of strengths and weaknesses corresponds to the evaluations of his classmates.

2. Respects the integrity and the dignity of other individuals as inferred from behavior such as the following:

   - Does not bully, tease, or force to act against their will, those weaker or younger than himself.
   - Practices common courtesies such as waiting in line without pushing, opening doors for elders, giving up his seat to elderly or disabled persons, using appropriate forms of address.
   - As chairman of a meeting, calls on and listens to all members of the group; does not permit others to interrupt while someone else is speaking.
   - Praises or comments in a mannerly way on the work or achievements of other classmates. ("That's a nice job, John," or "I see you put a lot of effort into making that map, Mary".)
   - Even under situations of stress refrains from stereotyped "name calling".
   - Demonstrates appropriate behavior in places such as a concert hall, museum, place of worship, ball park, movie, library, park, swimming pool.

3. Accepts responsibilities of membership and citizenship in family, school, community, and nation as inferred from behavior such as the following:

   - Assumes and performs regularly certain chores in the home (dinner dishes, baby sitting, etc.).
   - Cleans up and puts away materials after he has used them.
   - Volunteers to perform chores or assume chairmanship or membership on a committee.
   - Participates in making stage and school "rules" and observes them.
   - Exercises his right to vote in committee and school decision making.
   - Abides by the "rules" whether or not he approves of a particular rule.
   - Encourages family and neighbors to exercise their right to vote.
   - Voluntarily participates in a group project to improve school or other school activity before or after assigned hours (e.g., planting flowers, trash clean-up, tutoring, athletic team).
   - Volunteers to assist in a local or national election by distributing campaign materials to homes or at the polls, telephoning, door bell ringing, or baby sitting to turn out the vote.
   - Returns library books and other borrowed materials on time.

4. Is loyal as inferred from behavior such as the following:

   - Does not "squeal" or tattle on a friend or relative (where their action is not illegal or hurtful to others).
   - Defends or protects a friend or sibling from "bullying" in the neighborhood, school, or on the playground.

5. Believes in the rational settlement of disputes as inferred from behavior such as the following:

   - Does not use physical force in school or on the playground.
   - Settles his disagreements with others through discussion.
   - Encourages classmates who have a difference to discuss the problem.
   - In discussions of problem's involving conflict, proposes solutions leading to compromise or negotiation.

6. Respects truth and honesty as inferred from behavior such as the following:

   - Returns money received in excess, when given more than the correct amount of change for a purchase.

   - Abides by verbal agreements.

   - Gives appropriate credit for sources used in preparation of reports and other projects.

7. Appreciates the diversity of mankind as inferred from behavior such as the following:

   - While viewing a film about people of another culture, does not giggle or mock the action, activity, or appearance of others different from him.

   - Participates in role-playing situations, projecting himself into the shoes of people of other ages and cultures.

   - When offered the opportunity, is willing to taste the food, listen to the music, or experience other customs or practices of cultures different from his own.

   - Given an example of action or behavior of a person of another culture that he has studied, explains the reason or cause for the behavior.

   - Given an example of action or behavior of a person of an unfamiliar culture, attempts to infer the reason or cause for the action.

   - Voluntarily reads books, listens to records, and looks at films about people of other countries or cultures.

   - Given a "social distance" scale and a list of different groups, shows a high degree of tolerance for all groups.

8. Respects the natural environment and the beauty of nature as inferred from behavior such as the following:

   - Throws trash and other debris in appropriate container.

   - Preserves and protects flowers, trees, and other living things, plant and animal.

   - Participates voluntarily in class anti-pollution project.

9. Examines social issues in an open, rational manner as inferred from behavior such as the following:

   - Given a social problem and "panacea" type solution (e.g., the only way to stop air pollution is to make electric cars), explores alternative approaches to the problem.

   - As chairman of a group meeting to discuss an issue and propose a plan, calls on all members for opinions, tries to draw out all opinions, and refrains from calling for a vote until all points of view are aired.

   - Given a statement with which he disagrees or which contradicts his preconceptions, investigates the source of the new data, seeks to find additional data, and adjusts thinking if new information is corroborated. (E.g., figures indicate that Russia leads the U.S. in the production of maganese.)

10. Shows awareness of social issues as inferred from behavior such as the following:

    - Reads newspaper articles or watches television programs dealing with current social problems such as housing, pollution, and unemployment.

    - Contributes to discussions about social issues by expressing opinions and offering factual information and specific examples of recent events.

11. Is committed to an open, democratic society with equality of opportunity and justice for all as inferred from behaviors consistent with those described for the above values.

General Skills

12. Uses appropriate library resources, books and periodicals, reference guides, and informed persons to locate information on a given topic.

13. Using information he has located, identifies the main ideas and supportive details communicated to him and answers related questions.

14. Using information he has gathered and reviewed, evaluates the information on the basis of facts presented, relevancy of the information, author's purpose for writing, opinions and interpretations stated, and persuasive techniques.

15. Using information he has evaluated, analyzes the information by testing theories and hypotheses and makes generalizations drawn from specific data.

16. Using information he has evaluated, organizes and presents it and evaluates the effectiveness of his presentation.

17. Constructs and interprets graphically represented information.

18. Uses compass points as reference for establishing relations between geographic locations.

19. Given six commonly known geographic locations, puts them in order in terms of distance from his position.

20. Uses a variety of map types to locate given places or geographic features.

21. Uses scale and legend symbols to interpret information on a physical, isometric, isothermic, political, road, and street map.

22. Uses lines of longitude and latitude to locate geographic areas and to establish relationships between them.

23. Identifies and names map projections and indicates areas of greatest distortion.

24. Calculates the number of years between two given dates (e. g., 2550 B. C. to 1950 A. D.).

25. For the following events or time periods, gives the approximate duration of each and ranks them in terms of duration, longest to shortest:

    Civil War
    Prehistoric times
    Westward expansion of the United States
    Roman Empire dominated the world
    Flight of Apollo 11 to moon
    Voyage of Columbus to America

26. Constructs a time line of American history marking off centuries and places on it one event of his choice for each century.

27. Works independently, submits work for evaluation, and then accepts criticism and makes revisions.

28. Participates in group discussions or activities, respecting the opinions of others, waiting his turn to speak, and promoting the goals of the group.

29. Is aware of his own characteristics, feelings, and values.

30. Recognizes difference among human beings, classifying the differences as permanent, temporary, or changing.

31. Distinguishes between friendly and unfriendly behavior as typically expressed by himself and others and lists possible causes for unfriendly behavior.

32. Demonstrates empathy and respect for others.

Knowledge

Globalism

33. (G) Using a globe for the earth and a light bulb to represent the sun, demonstrates and explains the effect of the rotation of the earth, the inclinatio of the earth, and the revolution of the earth around the sun.

34. (G) Identifies, locates, and explains the effects of major ocean currents on land bodies.

Landforms

35. (G) On an unlabeled globe or map, identifies types of land forms and bodies of water.

Climate

36. (G, A) Identifies factors which influence temperature and precipitation, and describes how various types of climate influence human life in given regions.

37. (G, E) Identifies natural resources and products of a given area and explains how a culture or society is affected by natural resources or lack thereof.

Patterns of Diversity and Similarity

38. (G) Lists factors which determine regional divisions and identifies several regional groups based on each.

Change

39. (G) Locates and identifies examples of biotic and technological changes in a given environment.

Urbanization

40. (G, E, S, P) Describes regions of varied population density, identifying natural features and land use. Lists causes of, problems with, and results of urbanization.

World History

41. (H, A) Identifies, describes briefly, and locates in time and place, several of the great cultures, states, or empires which have existed in recorded history.

42. (H) Names four wars in the history of mankind and compares and contrasts reasons for each.

43. (H) Compares and contrasts given characteristics of life in the U. S. with those of other nations or civilizations.

Age of Exploration

44. (H, E, Psy) Selects one area discovered by explorers and describes the men involved, their reasons for exploration, and the technological innovations that made the adventure possible.

American History - General Chronology

45. (H) Sequences and identifies the correct century of significant events in American history.

Colonial American, Independence and the Founding of our Government

46. (H, A, P, Psy) Describes the colonial period in terms of people who populated the New World, the leaders who evolved, and the reasons for revolution and the establishment of an independent nation.

Westward Expansion

47. (H, G) Identifies major groups and their reasons for immigrating to America. Identifies major groups and their reasons for moving west.

Civil War and Reconstruction

48. (H, P, Psy) Selects what he considers to be major causes and effects of the Civil War in terms of significant events, groups, and personalities.

Post Civil War History

49. (H) Identifies significant causes and factors which have contributed the rise of the United States to its position as a world power.

Wants and Choices

50. (E, P, A) Given an individual or a family as a case study, identifies likely wants and needs and the choices that the individual or family must make.

Consumption

51. (E) Lists orally or in writing examples of economic consumption of goods and services.

Careers

52. (E) Explores occupational choices open to an individual and identifies training requirements for the occupation, availability of jobs in the field, salary levels.

Money

53. (E) States why money is used as a medium of exchange for goods and services. Identifies functions of checking and savings accounts. Explains the effects of inflation in terms of the value of a dollar.

Production

54. (E, G, S, H) Identifies elements of production and technological and locational factors which influence production.

Technology and Economic Development

55. (E, S, H) Identifies land, labor, and capital goods required for production in given industries and businesses. Explains how technological change has altered the need for given types of land, labor, and capital goods.

56. (E, H, G, S) Identifies the market for particular goods and services and lists various ways competing producers vie for the market yet keep profits at a maximum.

Modified Market Economy

57. (E, P, G, H) Names and describes the goods, services, costs, and benefits derived from government participation in a market economy (modified market economy).

General Forms of Government

58. (P) Describes general forms of government and gives examples of each.

Comparative Government

59. (P, G, E, S) Given a list of types of governments and examples of each, identifies as true or false statements made about each.

American Governing Institutions

60. (P) Given a list of branches, institutions, and levels of government in the United States and a list of the responsibilities of each, matches the branch or level and the functions.

Rights

61. (P, S, Psy) Lists and explains the rights guaranteed to every United States citizen.

62. (P, S, Psy) Given a proposed law, debates its merits, the consequences of its adoption, and the means of enforcing it.

Policy: Influence, Decision Making (Power)

63. (P, S, Psy) Describes a decision making process as it is carried out by an individual (president) or by a democratic group (legislature).

Public Opinion

64. (P) From a series of examples of newspaper articles, identifies the slant or bias of the writer.

Political Parties/Organizations

65. (P) From a list of policies and persons, identifies the party likely to be associated with each and say why (list must be limited to a specific period in U. S. history).

Interest Groups

66. (P) Given a list of interest groups, identifies issues in which they are likely to be involved, and their means of exerting pressures on policy makers.

Conflict

67. (Psy, P, S, H) In examples of individual, interpersonal, intergroup, or international conflict, identifies the possible reasons for the conflict and suggests alternative means of settling and dispute.

Cultural Anthropology

68.
(A, S)
Compares his own life with descriptions of life in three other societies and identifies the features of those societies that are culturally like and unlike his own.

Physical Anthropology

69.
(A, G, Psy)
Describes physical characteristics, needs, and adaptations to given environments made by both man and animals.

Archaeology and Evolution

70.
(A)
Lists and describes several stages in the evolution of man and of one plant or animal. Describes the role of the archaeologist in obtaining information about life in ancient and prehistoric times.

Social Organization

71.
(A, S, E)
Compares and contrasts his own and two other cultures in terms of the family structure, group organization, unique customs, and the enculturation process in each.

Social Control

72.
(A, S, P)
Given his own or another culture and a description of the laws dealing with treatment of criminals, marriage, ownership of property, or movement within and outside the borders, examines and describes the values in the culture that encourage or conflict with these laws.

Culture Change

73.
(S, A)
Selects and describes orally or in writing three daily practices and and contrasts them to those of a nineteenth century resident of his region and to a contemporary resident of another cultural region. (E.g., bus rides, eating frozen foods, watching current news on television, shopping in a supermarket.)

Arts and Humanities

Visual Arts

1. Given a series of examples, identifies the basic media used in painting, drawing, sculpture, photography.

2. Given available media and materials, uses all of them at least once to express a variety of ideas or feelings.

3. Views the works (originals and reproductions) of professional artists, sculptors, photographers, and craftsmen.

4. Given a collection of works in the same medium, selects one to write about or discuss in terms of his reaction to it, the artist, the form, the historical period in which it was done, or a topic of his choice.

5. Identifies various occupations involving art and explores the lives and training of artists and photographers by reading and/or interview.

6. Displays artistic works of his own.

Music

7. Given a series of examples, identifies basic media (band, vocal) and the musical forms (jazz, opera) represented. Identifies individual instruments both by sight (picture or actual instrument) and sound.

8. Reproduces an unfamiliar melody vocally or instrumentally by sight reading.

9. Listens to a variety of performances by professional musicians, including at least one live performance.

10. Given a series of recordings of a variety of musical forms, selects one to write about or discuss in terms of his reaction to it, facts about the composer, the form, the historical period in which it was written, or a topic of his choice.

11. Identifies various occupations involving music and explores the lives and training of musicians by reading and/or interview.

12. Sings or plays an instrument for an audience either alone or in a group.

Literature

13. Given a series of examples, identifies the basic forms of literature such as fable, myth, fairy tale, short story, play, novel, poem, nursery rhyme, journalistic report, biography, autobiography, riddle.

14. Writes a creative work in any of the short forms.

15. Listens to or reads the works of professional writers.

16. After reading or hearing several examples of literary works, selects one to write about or discuss in terms of his reactions to it, facts about the author, the form, the historical period in which it was written, or a topic of his choice.

17. Participates in a group to develop criteria for examining written work of his own and other students.

18. Identifies various occupations involving writing and explores the lives and training of writers by reading and/or interview.

19. Writes and reads orally for a group a poem, play, or short story.

Dance

20. Given a series of examples, identifies the basic forms of dance.

21. Uses the body to exercise and to express moods.

22. Views a variety of professional performances live or on film.

23. Views or participates in a variety of dances and selects one to write about or discuss in terms of his reaction to it, the choreography, the country and time of its origin, or a topic of his choice.

24. Given a series of examples of movements or dances, discusses each in terms of what mood or emotion it communicates to him.

25. Explores the lives and training of professional dancers.

26. Presents a dance for an audience either alone or in a group.

Drama

27. Given a series of examples, identifies the basic forms of drama.

28. Uses voice, face, and body to express moods, ideas, or behaviors of a character, or directs another child or group in performing a part in a play.

29. Views a variety of dramatic presentations including at least one live performance.

30. Given a variety of dramatic presentations to view or plays to read, selects one to write about or discuss in terms of his reaction [illegible] it, the playwright, the historical period in which it was written, or a topic of his choice.

31. Explores the lives and training of professional actors or playwrights.

32. Performs in a dramatic presentation or writes a work for others to perform.

Architecture and Urban Studies

33. Identifies physical and social elements of the urban environment.

34. Views a variety of buildings and landscapes first hand or in pictures.

35. Views a variety of buildings and landscapes which are designed for similar functions and selects one to discuss in terms of the architect, material used, period when built, or a topic of his choice.

36. Identifies various occupations involving architecture and explores the lives and training of architects by reading and/or interviews.

37. Draws a floor plan or constructs a three dimensional model of a building.

38. Exhibits a floor plan or three dimensional layout that he has constructed.

Physical Education*

1. Completes pull-ups according to the following criteria:

   Boys: On a bar of sufficient height to be comfortable to grip with palms facing forward and arms and legs fully extended, grasps the bar and pulls the body up with the arms until the chin is placed over the bar (not a snap movement, however) without raising the knees or kicking the legs or swinging the body, then lowers the body until the elbows are fully extended. Complete one such pull-up.

   Girls: On a bar adjusted to chest level and comfortable to grip, grasps bar with palms facing away from body, extends legs under the bar, keeping the body and knees straight, heels on the floor, fully extends arms to form 90° angle with the body line (another student can brace her heels to prevent slipping) then pulls body up with arms until the chest touches the bar, lowers the body until the elbows are fully extended keeping the body straight. Completes 8 such modified pull-ups without resting.

2. Completes sit-ups according to the following criteria: Lies on back with legs extended, feet about one foot apart. Hands, with finger interlaced, are clasped behind the neck. Another student holds the partner's ankles and keeps his heels in contact with the floor. Student sits up, turns trunk to the left, touches the right elbow to the left knee, and returns to starting position. Sits-up and turns trunk to the right, touches left elbow to the right knee, and returns to starting position. One sit-up counted each time student returns to starting position. Boys: 14 sit-ups; girls: 10 sit-ups.

3. Completes squat thrust according to the following criteria: Stands at attention. At signal bends knees and places hands on floor in front of feet. Arms may be between, outside of, or in front of the bent knees. Thrusts the legs back far enough so that the body is perfectly straight from the shoulders to feet and then returns to squat position and then to erect position. Boys: 4 squat thrusts in 10 seconds; girls: 3 squat thrusts in 10 seconds.

4. Swims 25 yards without touching the bottom of the pool.

5. Treads water for 5 minutes without touching the bottom of the pool.

6. Participates in group sports and games.

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* Objectives 1, 2, and 3 are taken from recommendations of the President's Council on Youth Fitness.

INTERMEDIATE OBJECTIVES FOR
FORT LINCOLN ELEMENTARY SCHOOL
WASHINGTON, D. C.

INTERMEDIATE OBJECTIVES

Discovery

Reading, Communication Skills, Mathematics, Social Studies, and Arts and Humanities

(There are no intermediate objectives for Health or Physical Education. Science objectives would be those listed in individualized lessons of the AAAS Program.)

DISCOVERY: BASIC LEARNING SKILLS*

1. Observing
2. Listening
3. Expanding Vocabulary
4. Improving Memory
5. Recognizing Characteristics
6. Classifying
7. Solving Problems
8. Predicting and Testing
9. Touching
10. Understanding Shapes
11. Knowing Color
12. Speaking
13. Following Directions
14. Counting
15. Understanding Numbers
16. Telling Time
17. Measuring
18. Sticking to a Task
19. Understanding Rules
20. Tasting and Smelling
21. Finger Dexterity
22. Drawing
23. Making and Building
24. Using Tools
25. Knowing the Alphabet
26. Relations with Others
27. Self-Care and Safety
28. Understanding "What?"
29. Understanding "Where?"
30. Understanding "When?"
31. Understanding "Why?"
32. Understanding "How?"
33. Understanding "Who?"
34. Making Sounds and Music
35. Physical Coordination

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* These objectives were developed by Universal Education Corporation as part of the Discovery Program. The program encompasses 476 major behavioral characteristics in skills and concepts that are further sub-divided into 1,341 sub-classifications for observation and evaluation. Discovery objectives are aimed at developing readiness in reading, writing, arithmetic, and beginning science, social studies, art, music.

Prepared by Bert Freilich, Fran Klagsbrun, Roy Ray, George Silverman, Thom Verhave, and David Whitney.

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Observing

1. Recognizes objects and pictures that are the same and those that are different.

1.01. Understands words same and different. (Dis. 5.01.)

1.02. Recognizes same and different in common objects.

- 1.02.01. Sorts collection of miniatures of common objects into groups of same kind -- cars, airplanes, etc.
- 1.02.02. Sorts pictures of common objects into groups of same kind--people, tools, etc.

1.03. Recognizes same and different in abstractions of common objects.

- 1.03.01. Sorts silhouettes of common objects into groups of same kind.
- 1.03.02. Sorts stylized minatures of common objects into groups of same kind.
- 1.03.03. Sorts stylized black and white drawings of common objects into groups of same kind.
- 1.03.04. Sorts highly impressionistic drawings of common objects into groups of same kind.

1.04. Remembers observations.

- 1.04.01. After studying picture of an object briefly and then having it taken away, finds identical picture in group of dissimilar pictures.
- 1.04.02. After studying picture of an object briefly and then having it taken away, finds identical picture in group of similar pictures.
- 1.04.03. Tells from memory what happened in silent motion picture he has seen.

1.05. Reads pictures in left to right sequence.

- 1.05.01. Tells story of what's happening by sequence of comic pictures on a page.
- 1.05.02. Arranges series of pictures from left to right to tell a story.

1.06. Recognizes same and different objects from different angles.

- 1.06.01. Sorts pictures by kind even though pictures show each object from a variety of different angles.

1.06.02. Identifies same object or shape in series of pictures even though object or shape is shown from different angles.

1.06.03. Given a set of pictures of an object from different angles along with a picture of a similar but different object, picks out one that is different.

1.06.04. Given a series of pictures of an object from different angles with a similar but different object shown in one picture in the series, picks out one that is different.

1.07. Finds camouflaged objects in pictures.

1.07.01. Finds objects hidden in camouflaged drawings.

1.07.02. Finds animals hidden in natural camouflage in photographs.

1.08. Discovers visual clues to complete a sequence.

1.08.01. After observing a series of pictures that change from one to the next in a regular pattern, chooses from among several similar possibilities the correct picture to complete the series.

1.08.02. After studying a series of abstract designs that change from one to the next in a regular pattern, chooses from among several similar possibilities the correct design to complete the series.

1.09. Recognizes same and different in perspective.

1.09.01. In a drawing rendered in perspective, identifies objects that are the same even though they are in different sizes.

1.09.02. In a drawing rendered in perspective, identifies which objects are closest and which are fathest away.

1.09.03. In a drawing rendered in perspective, identifies which objects are really the biggest and which are really the smallest.

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1.10. Discerns fine detail in pictures.

1.10.01. While looking at a picture, describes fine details observed, such as freckles on a boy's nose.

1.10.02. Interprets detail in pictures to draw conclusions about abstractions, such as what time of year the picture represents.

Listening

2. Identifies familiar sounds and responds to sounds or to oral instruction.

2.01. Shows interest in what is said.

2.01.01. Looks at pictures while story is being read, or examines object while it is being described, or looks in direction of the location where an event being described happened.

2.02. Identifies subjects being discussed or referred to.

2.02.01. Indicates which object is being referred to.
2.02.02. Selects appropriate item from verbal description.
2.02.03. Finds aspect of picture described.

2.03. Recognizes aspects of voices.

2.03.01. Indicates whether a voice or records is male or female, or recognizes some other children by voice alone.
2.03.02. Can imitate an "angry voice".
2.03.03. Can imitate a "happy voice".
2.03.04. Can imitate a "sad voice".

2.04. Understands comparative loudness of sounds.

2.04.01. Responds to: "Say that softer (more softly)."
2.04.02. Responds to: "Say that louder (more loudly)."
2.04.03. Identifies which of two sounds is softer.
2.04.04. Identifies which of two sounds is louder.

2.05. Identifies sounds in terms of high and low.

2.05.01. Names various sounds which are normally high pitched, souch as -- train whistle, bird's chirp, siren or fire engines and police cars.
2.05.02. Names various sounds which are normally low pitched, such as -- fog horns, sound of a truck's engine, hitting an empty box.
2.05.03. Responds to: "Make a sound which is higher than that one".
2.05.04. Responds to: "Make a sound which is lower that that one".

2.06. Understands comparative duration of sounds.

2.06.01. Identifies the longer of two sounds, or demonstrates to another, what a "long" sound is.
2.06.02. Identifies the shorter of two sounds, or demonstrates to another, what a "short" sound is.

2.07. Knows sounds made by various animals.

2.07.01. Imitates sounds made by several animals, such as: cow, dog, cat, rooster.
2.07.02. Names animals by listening to recording of the sounds.

2.08. Knows common sounds.

2.08.01. Imitates sound made by several physical actions, such as: motorcycle, light switch, stick breaking, water coming out of tap.
2.08.02. Names by listening to recording of sounds objects or actions.
2.08.03. Provides a description (verbal or vocal) of the sounds made by; paper burning; something falling in water; and glass breaking.

2.09. Demonstrates awareness of musical rhythm.

2.09.01. Makes rhythmic movements to music.
2.09.02. Taps or claps in rhythm with feet, hands or stick.
2.09.03. Can tap to every other beat of a metronome.

2.10. Shows knowledge of some musical sound properties.

2.10.01. Verbally or vocally describes the kind of sounds made by violin, guitar or harp.
2.10.02. Names by listening to recording four of the following instruments: violin, guitar, flute, saxophone, chimes, xylophone, piano, harp, drum, symbols.
2.10.03. Suggests an instrument which makes a similar sound to: tapping a glass of water, i.e. drum or base fiddle.
2.10.04. Names an instrument which has strings, i.e. violin, or harp.
2.10.05. Names an instrument which you blow through, i.e. trumpet or tuba.
2.10.06. Names an instrument which you hit with a stick, i.e. xylophone or drum.

2.11 Demonstrates ability to localize a sound.

2.11.01. Finds a hidden clock by its "tick".
2.11.02. Indicates the direction an unseen sound comes from.
2.11.03. Indicates which of several unseen people make a noise.

2.12. Determines direction of movement by sound.

2.12.01. Tells if the distance from a sound source is increasing.
2.12.02. Tells if the distance from a sound source is decreasing.
2.12.03. Tells from sounds the direction someone is walking in.

2.13. Repeats stories or instruction after hearing them.

2.13.01. Tells a familiar children's story.
2.13.02. Explains rules for a game to others.
2.13.03. Repeats simple story after hearing it told.

2.14. Abstracts meaning from simple fables or sayings.

2.14.01. Tells the moral of a simple fable.
2.14.02. Tells the meaning of such sayings as,
"A stitch in time saves nine,"
"Penny wise and dollar foolish,"
"A rolling stone gathers no moss."

2.15. Accurately repeats series of unrelated events after hearing them.

2.15.01. Gives highlights of a radio news summary, or summarizes what someone else said they did on vacation.

Expanding Vocabulary

3. Names familiar objects or actions and uses descriptive words.

3.01. Labels objects upon seeing them.

3.01.01. Given object, names it.
3.01.02. Given group of different objects, names each.

3.02. Labels objects upon seeing representations of them.

3.02.01. Given picture of object, names it.
3.02.02. Given picture of related objects, names each pointed to.

3.03. Relates names of objects to verbal descriptions.

3.03.01. Given name of object and description, tells whether statement is true or false; such as, "A dog meows." "False."
3.03.02. Given name of object, describes it; such as "Bird." "An animal that flies."
3.03.03. Given physical description of object, names it; such as, "It has four wheels and an engine." "A car."
3.03.04. Given function of an object, names it; such as, "Something you fly in." "An airplane."
3.03.05. Guesses names of objects playing "Twenty Questions."

3.04. Relates words to actions.

3.04.01. Given an action word, acts it out; such as, *hops*.
3.04.02. Given a picture of an action, names the action.
3.04.03. Given a picture of an object, acts out how to use it, such as a *rake*.
3.04.04. Guesses words playing charades.

3.05. Uses antonyms.

3.05.01. Given a word, states its opposite: such as *high* - *low*.

3.06. Uses synonyms.

3.06.01. Given a word, states another word that means the same; such as, car - automobile.

3.07. Understands a word can have several meanings.

3.07.01. Given a word, such as *can* or *fan*, uses it in sentences to show its several meanings.

3.08. Relates words to their definitions.

3.08.01. Given a simple definition of a word, states the word.
3.08.02. Solves simple crossword puzzles when definitions are read to him.
3.08.03. Asks meaning of unfamiliar words.

3.09. Understands words from pictograph representations.

3.09.01. Names what symbols stand for in pictograph tables or charts.
3.09.02. Solves simple rebuses.

3.10. Uses words in unique ways.

- 3.10.01. Makes up nonsense rhymes with words.
- 3.10.02. Makes up unique similies: such as, "as quiet as a ------"
- 3.10.03. Makes up puns playing, Knock, Knock, Who's There?"

3.11. Uses words related to sounds. (Dis. 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.10.).

3.12. Uses words related to characteristics. (Dis. 5.01, 5.02, 5.03, 5.04).

3.13. Uses words related to shapes. (Dis. 10.13, 10.15, 10.17.).

3.14. Uses words related to color. (Dis. 11.06, 11.08.).

3.15. Uses words related to numbers. (Dis. 14.01, 14.02, 14.08, 15.01, 15,02, 15.03, 15.05, 15.10, 15.11, 15.12, 15.15.).

3.16. Uses words related to money. (Dis. 15.14.).

3.17. Uses words related to time. (Dis. 16.00 and 30.00.).

3.18. Uses words related to measuring. (Dis. 17.00.)

3.19. Uses words related to touch. (Dis. 9.00.).

3.20. Uses words related to taste and smell. (Dis. 20.00.).

3.21. Uses words that are names of classes and sub-classes. (Dis. 28.00.).

3.22. Uses spatial relationship words. (Dis. 29.00.).

3.23. Uses words related to science. (Dis. 31.00).

3.24. Uses words related to machines and processes (Dis. 32.00.).

3.25. Uses words related to the roles and needs of people. (Dis. 33.00.).

Improving Memory

4. Recalls visual or verbal patterns and memorizes simple verses and poems.

4.01. Recognizes hidden or missing objects.

4.01.01. Shown an object, the object having been removed from sight and presented in a group with two new objects, selects the original object.

4.01.02. Selects a matching picture from a group of new pictures after having been shown original picture which was later hidden.
4.01.03. Selects original set of twoobjects from a group of new toy objects after original objects were shown and hidden.
4.01.04. Tells what object is missing without knowing of its removal.
4.01.05. Tells what two objects are missing without knowing of their removal.
4.01.06. Tells what three, four or five objects are missing without knowing of their removal.

4.02. Recalls immediately simple verbal tasks.

4.02.01. Repeats a sequence of words (house, man, dog, cat)
4.02.02. Repeats a sequence of digits (6, 5, 4, 2)

4.03. Recalls immediately complex verbal tasks.

4.03.01. Recalls a sequence of events in a short story (Three Bears).
4.03.02. Recalls important facts from a short story (name, time, characters, etc.)
4.03.03. Repeats a sentence.
4.03.04. Reproduces a pattern of sounds (hand claps) after hearing a pattern.

4.04. Recalls immediately visual tasks.

4.04.01. Picks out hidden picture (first shown) from a group of three pictures.
4.04.02. Picks out matching picture from a group of pictures after picture is hidden.
4.04.03. Selects two pictures from group of new pictures after first two pictures were shown and hidden.
4.04.04. Names picture objects (three) after turning picture over and recalls correct picture lying face down.

4.05. Recalls immediately visual materials.

4.05.01. Draws a copy of simple lines and shapes after viewing each one for 5 seconds.
4.05.02. Draws a copy of simple objects after viewing each one for 5 seconds.

4.06. Recalls patterns immediately.

4.06.01. Draws a pattern similar to pattern of beads shown after viewing for 5 seconds.
4.06.02. Draws a pattern similar to picture of beads or shapes after viewing for 5 seconds.

4.07. Recalls simple verbal task after delay interval.

4.07.01. Reproduces (after 1 minute) similar sound to one presented earlier.

4.08. Recalls complex verbal task after delay interval.

4.08.01. Reproduces (after 1 minute) sequence of sounds heard earlier (clap, foot thump, clap)

4.09. Recalls simple visual task after delay interval.

4.09.01. Reproduces by drawing, lines and shapes, after delay in seeing items for 1 minute (vertical line, semi-circle, circle, square)

4.10. Recalls complex visual task after delay interval.

4.10.01. Reproduces, by drawing, familiar objects after delay in seeing object for 1 minute (house, tree, person).
4.10.02. Recalls the position of three objects (train, cat, spoon) after delay of 1 minute.
4.10.03. Recalls amount of objects (1 train, 2 cats, 2 spoons) after delay of 1 minute.

4.11. Recalls events after long term delay.

4.11.01. Recall of important events of previous week.

4.12. Follows simple directions. (Dis. 13.2.1).

4.12.01. Follows 3 part command (open box, put crayon under table, turn box over).

4.13. Follows complex verbal directions. (Dis. 13.8.1).

4.13.01. Follows 4 part command (open and close book, pick out three crayons, draw a picture, tell a story about picture)

4.14. Recalls simple verbal material.

- 4.14.01. Recites words to rhyme (one-two button shoe, etc.)

4.15. Recalls complex verbal material.

- 4.15.01. Recites words to song (This old man..he had two..he had..)
- 4.15.02. Memorizes short poem.

4.16. Uses memorization techniques.

- 4.16.01. Recites list of words paired with numbers accompanying them (1-boy, 2-dog, 3-flower)
- 4.16.02. Recites short list of numbers by backward chaining (learns last number first and repeats each successive set of numbers until first number is reached)
- 4.16.03. Learns poem after technique of memorizing whole poem.
- 4.16.04. Learns poem after technique of memorizing separate parts of the poem first.
- 4.16.05. Learns poem after repeating parts of the poem over several days.

Recognizing Characteristics

5. Describes physical and abstract characteristics of an object or picture of an object.

5.01. Understands like and not like.

- 5.01.01. When asked "Picks out one that is like this one," chooses from several objects one similar to the sample shown.
- 5.01.02. When asked "Pick out one that is not like this one," chooses from several objects one dissimilar to the sample shown.

5.02. Understands alike and not alike.

- 5.02.01. When asked "Pick those that are alike," chooses objects that are alike from a group.
- 5.02.02. When asked "Pick those that are not alike," chooses objects that are not alike from a group.

5.03. Understands same and different.

- 5.03.01. When asked "Pick those that are the same," chooses objects that are the same from a group.

5.03.02. When asked "Pick those that are different," chooses objects that are different from a group.

5.04. Understands only, some, and all.

5.04.01. When asked "Pick up only a red one," does so.
5.04.02. Responds correctly to a direction using the word some, such as, "Pick up some of the blocks."
5.04.03. Responds correctly to a direction using the word all, such as, "Pick up all the blocks."

5.05. Uses terms of differentiation and similarity.

5.05.01. Uses the word like to indicate similarity.
5.05.02. Uses the words not alike to indicate difference.
5.05.03. Uses the word alike to indicate similarity.
5.05.04. Uses the words not alike to indicate difference.
5.05.05. Uses the word same to indicate identical.
5.05.06. Uses the word different to indicate difference.
5.05.07. Uses the word only correctly.
5.05.08. Uses the word some to indicate a few.
5.05.09. Uses the word all correctly.

5.06. Understands the law of conservation.

5.06.01. Given a group of objects that are alike and told they are called "glebs," understands they are still called "glebs" when arranged in different patterns or stacked on top of each other.
5.06.02. When a different object is added to the group, picks this one out as being "not a gleb."
5.06.03. When more objects that are not alike are added to the group, picks out all the "glebs."
5.06.04. When only two "glebs" are included in a set of ten other dissimilar objects, picks out the two "glebs."

5.07. Matches.

5.07.01. Given an object as a sample, picks out one that is the same from a set of dissimilar objects.
5.07.02. Given several different samples, picks out one that is the same from a set of dissimilar objects.

5.08. Sorts.

5.08.01. Given a mixed group of two sets of identical objects, sorts the group into the two sets; such as a group of red and blue balls to be sorted into a set of red balls and a set of blue balls.

5.08.02. Given a mixed group containing several sets of identical objects, sorts the group into the separate sets.

5.09. Recognizes physical characteristics.

5.09.01. Recognizes shapes. (Dis. 10.00.).
5.09.02. Recognizes colors. (Dis. 11.00.).
5.09.03. Recognizes sounds. (Dis. 2.00.).
5.09.04. Recognizes textures. (Dis. 9.00.).
5.09.05. Recognizes tastes and odors. (Dis. 20.00.).
5.09.06. Recognizes size and weight. (Dis. 17.00.).

5.10. Recognizes abstract characteristics.

5.10.01. Recognizes functional characteristics. Identifies pictures of objects, grouping them by their function, such as things that clean (broom, carpet sweeper, dust pan, etc.), things that are eaten (bread, fruit, vegetables), and so on.

5.10.02. Recognizes group usage. Groups pictures of objects based on their need to be used together, such as (pencil and paper), (knife, fork, and spoon), and so on.

5.10.03. Recognizes number characteristics. (Dis. 14.00. and 15.00).
5.10.04. Recognizes time characteristics. (Dis. 16.00. and 30.00.).
5.10.05. Recognizes spatial relationships. (Dis. 29.00.).

5.11. Describes characteristics.

5.11.01. Describes physical characteristics of objects.
5.11.02. Describes physical characteristics of pictures of things.
5.11.03. Describes abstract characteristics of objects.
5.11.04. Describes abstract characteristics of pictures of things.

Classifying

6. Classifies objects by one or more characteristics

6.01. Recognizes characteristics. (Dis. 5.00.).

6.02. Arranges in sequence.

- 6.02.01. Arranges set of rods in order from shortest to longest.
- 6.02.02. Arranges set of objects in order from lightest to darkest.
- 6.02.03. Arranges set of objects in order from smallest to biggest.
- 6.02.04. Arranges set of objects in order from shortest to tallest.

6.03. Inserts in sequence.

- 6.03.01. Given a sequence in order of length, inserts added objects at correct positions in sequence.
- 6.03.02. Given a sequence arranged from light to dark, inserts added objects at correct positions in sequence.
- 6.03.03. Given sequence arranged by size, inserts added objects at correct positions in sequence.
- 6.03.04. Given sequence arranged by height, inserts added objects at correct positions in sequence.

6.04. Describes missing elements of a sequence.

- 6.04.01. Given an incomplete set of objects graduated in one physical characteristic, arranges them in sequence and describes the missing objects.
- 6.04.02. Given an incomplete set of objects graduated in more than one physical characteristic, arranges them in sequence and describes the missing objects.

6.05. Classifies on basis of two physical characteristics.

- 6.05.01. Given a set of objects differing in two physical characteristics, such as color and shape, sorts them on the basis of one characteristic and then resorts entire group on basis of the other characteristic.
- 6.05.02. Given a set of objects differing in two physical characteristics, such as color and shape, sorts them into two groups on the basis of one characteristic, and then sorts each group into smaller sets based on the other characteristic.

6.06. Classifies on basis of several physical characteristics.

- 6.06.01. Classifies mixed group of objects into a grid format so that items in each row have a physical characteristic in common with others in that row.

6.06.02. Classifies mixed group of objects into sets and sub-sets so that each set and each sub-set has physical characteristics in common.

6.07. Classifies on basis of abstract characteristics.

6.07.01. Given pictures of groups of objects, describes the abstract characteristic that was the basis of their grouping.

6.07.02. Given separate pictures of objects, groups them together on basis of abstract characteristics named by adult.

6.07.03. Given separate pictures of objects, groups them into sets and sub-sets based on abstract characteristics chosen by himself.

6.08. Describes basis of classification of pre-sorted arrangements.

6.08.01. Given a pre-sorted group arranged into a grid pattern, describes characteristics that are the basis of the classification and the characteristics each row has in common.

6.08.02. Given a pre-sorted classification arranged in sets and sub-sets, describes characteristics that are the basis of the classification and the characteristics that each set and sub-set have in common.

6.09. Describes missing items in pre-sorted classification.

6.09.01. Given a pre-sorted group arranged into a grid pattern with some items missing, describes the characteristics of the missing items.

6.09.02. Given a pre-sorted group arranged into sets, sub-sets missing, describes the characteristics of the missing items of sub-sub-sets.

6.10. Describes members of set when given class name.

6.10.01. When given a large class name, such as animal, names many sub-sets in that class, such as elephants, lions, dogs.

6.10.02. After naming sub-sets for a large class name, such as animals, names sub-sub-sets for each of the sub-set names--for example, if dogs is a sub-set name, can name several kinds of dogs: collie, cocker spaniel, and so on.

Solving Problems

7. Seeks relevant information to solve problems, plans strategy for games or problems, attacks a problem rationally or systematically, and anticipates future events in a series based upon past events.

7.01. Uses logical relation words.

- 7.01.01. Uses words such as because or so.
- 7.01.02. Uses words such as unless or therefore.

7.02. Seeks information to aid in problem solving.

- 7.02.01. Asks for needed information to solve a problem.
- 7.02.02. Uses picture to aid in solving jigsaw puzzle.

7.03. Shifts strategy in a changing problem situation.

- 7.03.01. Plays tick-tack-toe.
- 7.03.02. Plays dominoes.

7.04. Makes systematic approach toward problems.

- 7.04.01. Searches an area systematically for object.
- 7.04.02. Looks only once in a given area while searching for object before examining other areas.

7.05. Verbalizes rationale for actions or conclusions.

- 7.05.01. Gives reasons for his opinions.
- 7.05.02. States why he wants to try something to solve problems.
- 7.05.03. Gives reasons for doing something a certain way.

7.06. Completes sequences based upon pattern.

- 7.06.01. Adds a new section of eight beads, repeating established pattern on string of beads.
- 7.06.02. Corrects a pattern sequence of dominoes in which two dominoes have been misplaced in a sequence of ten.

7.07. Works out verbal problems.

- 7.07.01. Solves riddles such as: "What is round but does not roll, but helps you read a story?" (Answer, the letter o) or "What's black and white and read all over?" (Answer, newspapers).
- 7.07.02. Figures correct answer to questions such as, "If I have only one red ball and you have only one green ball, how many blue balls do we have?" (Answer, none), or "If I have two pieces of candy, and I give you one piece of candy, and I eat my piece of candy, how many pieces of candy do you have?" (Answer, one piece).

7.08. Continues three dimensional sequences given pattern.

    7.08.01. Adds new levels to tower made of construction set pieces.
    7.08.02. Extends model bridge built from a construction set.

7.09. Solves visual problems.

    7.09.01. Finds way through complicated maze.
    7.09.02. Finds correct matching items in complex visual display such as: drawings with hidden figure drawings.

7.10. Anticipates future events of a series based upon past events.

    7.10.01. Tells which light will flash next in a repeating pattern of flashing lights, or tells what will be on the next card turned up in a series of cards, such as red, blue, green, orange, red, blue, green, orange, ___?___(red).
    7.10.02. Tells which number will be said in a series of numbers which repeat, such as, 1, 3, 2, 4, 1, 3, 2, 4, _?_(1).

7.11. Applies available materials and tools to new situations.

    7.11.01. Uses materials and tools in unusual but logical ways, such as; uses round container for toys as the top for a "water tower", or uses a hammer as a paper weight.
    7.11.02. "Cuts" out paper form by punching a series of holes around the edge with pencil or nail.

7.12. Solves simple problems in three-dimensional space.

    7.12.01. Plays three-dimensional tick-tack-toe.

7.13. Attends to relevant information, ignoring the irrelevant.

    7.13.01. Locates specific item in complex, "cluttered" picture.
    7.13.02. Locates and marks all of a specific letter, numeral, or symbol in a printed collection, such as; finds every letter "e" in a typed sentence.

7.14. Shows ability to make a systematic approach to solving a problem.

    7.14.01. Sort jigsaw puzzle pieces into colors and shapes, or sorts Cuisennaire Rods into colors and shapes before attempting to replace them in a sort box.
    7.14.02. Given a lock and many keys; places keys as he tests them into separate collections.

7.15. Shows ability to generate plans or strategies in simple chance situations.

- 7.15.01. Plan strategies in a simple game of chance, such as hide-and-seek.

7.16. Plans strategies in complicated chance situations.

- 7.16.01. Plans strategies for backgammon or Old Maid.

7.17. Plans strategies in games of skill.

- 7.17.01. Plans strategies in checkers.

Predicting and Testing

8. Predicts results of an occurrence on the basis of given information and tests predictions.

8.01. Predicts logical completion based upon initial information.

- 8.01.01. Gives a logical ending for partly finished story he has been told.
- 8.01.02. States which of two "hour-glasses" will empty first after watching less than a quarter of sand fall through.

8.02. Predicts results of simple verbal suppositions.

- 8.02.01. Answers simple questions that begin, "What will happen if ...", such as, "...if I drop a glass of water?"
- 8.02.02. Answers simple "suppose" questions, such as, "Suppose the sun stopped shining, will it get cold?"

8.03. Predicts correctly from total, but disorganized, information.

- 8.03.01. Tells what a jigsaw puzzle will look like based upon the unfitted pieces.

8.04. Predicts results of rearrangements of forms.

- 8.04.01. Given several flat geometric shapes, tells before trying, which of two outlines they will fit into.

8.05. Extrapolates from available information.

- 8.05.01. Tells if two lines will cross each other if each is drawn longer.

- 8.05.02. Tells if available pieces of a construction set will be enough to complete a bridge between two locations.

8.06. Tests to confirm predictions with colors.

- 8.06.01. Mixes two colors of paint to confirm the color predicted by others.
- 8.06.02. Makes own predictions before mixing other paint colors and then mixes to confirm.
- 8.06.03. Mixes two colors of light to confirm the color predicted by others.
- 8.06.04. Makes own predictions before mixing various colored lights together.

8.07. Predicts outcomes based upon common types of previous experience.

- 8.07.01. States, "Bag will rip", as a result of wetting a full paper bag.
- 8.07.02. States, where a ball will bounce to if thrown against a wall at various angles.
- 8.07.03. Tells what will happen if an ice cube is placed in hot coffee or water.

8.08. Tests and predicts using verbal skills only.

- 8.08.01. Wins with reasonable frequency verbal games, such as, twenty questions.

8.09. Tests and predicts using visual and verbal skills.

- 8.09.01. Wins with reasonable frequency pantomine game, such as, charades.

Touching

9. Identifies or describes objects by touch.

9.01. Identifies textures by touch.

- 9.01.01. Pairs identical textures by touch alone.
- 9.01.02. Picks out objects designated as "rough" and "smooth" by touch alone.
- 9.01.03. Names objects touched as "rough" or "smooth".
- 9.01.04. Orders a series: smoothest to roughest

9.02. Identified hardness by touch.

9.02.01. Pairs objects with identical degrees of hardness, using touch alone.
9.02.02. Selects objects designated as "hard" and "soft", using touch alone.
9.02.03. Names objects touched as "hard" and "soft".
9.02.04. Orders a series: softest to hardest.

9.03. Identifies shapes by touch.

9.03.01. Pairs identical shapes by touch alone.
9.03.02. Selects objects designated as "straight" or "curved", using touch alone.
9.03.03. Selects spheres, squares, rectangular solids, pyramids, cones, cylinders, when asked for by name, using touch alone.
9.03.04. Without looking, identifies and names the above shapes.

9.04. Identifies sizes by touch.

9.04.01. Without looking, sorts objects between large and small.
9.04.02. Without looking, orders series of objects from largest to smallest.

9.05. Identifies temperatures by touch.

9.05.01. Identifies and names objects as "cold", "warm", and "hot".
9.05.02. Identifies which clothes should be appropriate for different outside temperatures.

9.06. Integrates tactile experiences with visual representations and verbal concepts.

9.06.01. When presented an array of pictures, verbally describes textures, hardness, shapes, size and temperatures (where applicable, e.g. ice).
9.06.02. When presented an array of pictures, selects ones which have tactile characteristics described by an adult: e.g., "Name something that will feel rough."
9.06.03. Given a verbal problem only, without actual object or pictures, states how an object would feel.

9.06.04. Given a verbal problem only, without actual object, compares how two objects would feel using comparative, tactile terms, e.g. sandpaper is rougher than cotton, rubber is softer than wood.

9.06.05. Given pictures of objects, finds objects themselves by reaching into a large bag without looking.

Understanding Shapes

10. Identifies and names basic shapes.

10.01. Recognizes differences among solid and plane shapes.

10.01.01. Picks out plane shape different from others that are the same in color and size.

10.01.02. Picks out solid shape different from others that are the same in color and size.

10.02. Fits solid and plane shapes into form boards.

10.02.01. Places correct solid shapes into form board.

10.02.02. Places correct plane shapes into form board.

10.03. Matches solid shapes.

10.03.01. Picks from group of solid shapes, one that matches a model.

10.03.02. Picks from group of solid shapes of varying sizes or colors one that matches a model.

10.04. Matches plane shapes.

10.04.01. Picks from group of plane shapes, one that matches a model.

10.04.02. Picks from group of plane shapes of varying sizes or colors one that matches a model.

10.05. Sorts solid shapes.

10.05.01. Groups together from many solid shapes those that look the same.

10.05.02. Groups together from many solid shapes those that are the same shape despite color or size difference.

10.06. Sorts plane shapes.

10.06.01. Groups together from many plane shapes those that look the same.
10.06.02. Groups together from many plane shapes those that are the same shape despite color or size difference.

10.07. Matches plane shapes to drawings of the shape.

10.07.01. Places similar plane shapes on drawings of that shape.
10.07.02. Places similar plane shapes on drawings of that shape while in different sizes or perspectives.

10.08. Matches solid shapes to drawings of that shape.

10.08.01. Places similar solid shapes on drawings of that shape.
10.08.02. Places similar solid shapes on drawings of that shape while in different sizes or perspectives.

10.09. Matches picture of plane shapes.

10.09.01. Picks from a group of pictures of shapes, the one that matches a model.
10.09.02. Picks from a group of pictures of shapes, the one that matches a model despite color or size differences.

10.10. Matches pictures of solid shapes.

10.10.01. Picks from a group of pictures of solid shapes, the one that matches a model.
10.10.02. Picks from a group of pictures of solid shapes, the one that matches a model despite color or size differences.

10.11. Sorts pictures of shapes.

10.11.01. Groups together, from many pictures of shapes, those that look the same.
10.11.02. Groups together, from many pictures of shapes, those that look the same despite color or size differences.

10.12. Identifies plane shapes.

10.12.01. Points to circle when named.
10.12.02. Points to square when named.
10.12.03. Points to triangle when named.
10.12.04. Points to rectangle when named.
10.12.05. Points to diamond when named.

10.13. Names plane shapes.

- 10.13.01. Names circle when pointed to.
- 10.13.02. Names square when pointed to.
- 10.13.03. Names triangle when pointed to.
- 10.13.04. Names rectangle when pointed to.
- 10.13.05. Names diamond when pointed to.

10.14. Identifies solid shapes.

- 10.14.01. Points to sphere when named.
- 10.14.02. Points to cube when named.
- 10.14.03. Points to pyramid when named.
- 10.14.04. Points to cylinder when named.
- 10.14.05. Points to cone when named.

10.15. Names solid shapes.

- 10.15.01. Names sphere when pointed to.
- 10.15.02. Names cube when pointed to.
- 10.15.03. Names pyramid when pointed to.
- 10.15.04. Names cylinder when pointed to.
- 10.15.05. Names cone when pointed to.

10.16. Identifies straight and curved lines.

- 10.16.01. Points to straight line when named.
- 10.16.02. Points to curved line when named.

10.17. Names straight and curved lines.

- 10.17.01. Names straight line when pointed to.
- 10.17.02. Names curved line when pointed to.

10.18. Draws basic shapes and lines (Dis. 21, 22 & 23).

- 10.18.01. Draws basic geometric shapes and lines from a model.
- 10.18.02. Draws basic geometric shapes and lines without a model.

10.19. Constructs models of geometric shapes (Dis. 21 & 23).

- 10.19.01. Makes clay shapes from a model of a solid.
- 10.19.02. Makes clay shape without a model.

10.20. Identifies shapes in complex objects.

- 10.20.01. Names objects in surroundings that exemplify basic shapes.
- 10.20.02. Names pictures of objects that exemplify basic shapes.

10.21. Constructs detailed objects. (Dis. 21 & 23).

- 10.21.01. Assembles jigsaw puzzle correctly.
- 10.21.02. Constructs pictures of familiar objects (tree, house, man) from flat geometric shapes (2 piece-picture).
- 10.21.03. Constructs pictures of objects from flat geometric shapes (3 or more piece-picture).

10.22. Identifies printed symbols. (Dis. 21, 22, & 25).

- 10.22.01. Matches similar letters to a model.
- 10.22.02. Puts similar letters into a group.
- 10.22.03. Names and points to letter A.
- 10.22.04. Names and points to letter A from a group of letters.
- 10.22.05 Names and points to other letters of the alphabet.
- 10.22.06. Recognizes and points to own written name.

10.23. Identifies shapes that intersect.

- 10.23.01. Traces and points out (using difference colors), separate shapes that are superimposed (two shapes).
- 10.23.02. Traces and points out separate shape that is imbedded in several other shapes.

Knowing color

11. Identifies and names the colors.

- 11.01. Understands the words same and different. (Dis. 5.03).
- 11.02. Distinguishes same and different in color.
  - 11.02.01. Given two red objects and one blue object, points to the one that is different.
  - 11.02.02. Given two red objects and one yellow object, points to the one that is different.
  - 11.02.03. Given two yellow objects and one blue object, points to the one that is different.
  - 11.02.04. Given two red objects and one orange object, points to the one that is different.

11.02.05. Given two red objects and one green object, points to the one that is different.

11.02.06. Given two orange objects and one yellow object, points to the one that is different.

11.02.07. Given two purple objects and one green object, points to the one that is different.

11.02.08. Given two blue objects and one purple object, points to the one that is different.

11.03. Matches color.

11.03.01. Given a red object as a sample, chooses from several other objects a red one that matches the sample.

11.03.02. Given a yellow object as a sample, chooses from several other objects a yellow one that matches the sample.

11.03.03. Given a blue object as a sample, chooses from several other objects a blue one that matches the sample.

11.03.04. Given an orange object as a sample, chooses from several other objects an orange one that matches the sample.

11.03.05. Given a green object as a sample, chooses from several other objects a green one that matches the sample.

11.03.06. Given a purple object as a sample, chooses from several other objects a purple one that matches the sample.

11.03.07. Given a black object as a sample, chooses from several other objects a black object that matches the sample.

11.03.08. Given a white object as a sample, chooses from several other objects a white one that matches the sample.

11.04. Sorts by color.

11.04.01. Given a set of objects that includes several of each color, sorts each of the colors into separate sets by putting those that are the same together--red, yellow, blue, green, orange, purple, black, and white.

11.05. Points to colors when named.

11.05.01. Given set of objects representing all the basic colors, points to or selects red object when named by adult.

11.05.02. Given set of objects representing all the basic colors, points to or selects yellow object when named by adult.

11.05.03. Given set of objects representing all the basic colors, points to or selects blue object when named by adult.

11.05.04. Given set of objects representing all the basic colors, points to or selects orange object when named by adult.

11.05.05. Given set of objects representing all the basic colors, points to or selects green object when named by adult.
11.05.06. Given set of objects representing all the basic colors, points to or selects purple object when named by adult.
11.05.07. Given set of objects representing all the basic colors, points to or selects black object when named by adult.
11.05.08. Given set of objects representing all the basic colors, points to or selects white object when named by adult.

11.06. Names colors.

11.06.01. Given set of eight identical objects that vary in color only, selects and names each correctly for each of the eight basic colors.
11.06.02. Given eight objects that differ in size and shape as well as color, selects and names each of the eight basic colors.

11.07. Mixes colors in paint.

11.07.01. Mixes green paint from yellow and blue.
11.07.02. Mixes orange paint from red and yellow.
11.07.03. Mixes purple paint from red and blue.

11.08. Understands lighter and darker.

11.08.01. Given two objects that are different shades of the same color, chooses one that is lighter.
11.08.02. Given two objects that are different shades of the same color, chooses one that is darker.

11.09. Mixes lighter and darker shades of paint.

11.09.01. Understands to mix white paint with a color to make it lighter.
11.09.02. Understands to mix black paint with a color to make it darker.

11.10. Understands color in light.

11.10.01. Uses a light box to show that colors in light mix differently than colors in paint.
11.10.02. Understands that a prism separates white light into a spectrum of colors.
11.10.03. Understands that raindrops act as prisms to create a rainbow from sunlight.

Speaking

12. Speaks so he can be understood and can answer simple questions in sentences using various parts of speech.

12.01. Speaks understandably.

12.01.01. Does not stutter.
12.01.02. Does not stammer.
12.01.03. Does not lisp.

12.02. Speaks audibly.

12.02.01. Can be heard easily when speaking.
12.02.02. Does not have to be asked to speak louder.

12.03. Articulates clearly.

12.03.01. Separates words so each can be clearly understood.
12.03.02. Usually accents correct syllable in multi-syllable words.

12.04. Uses complete sentences.

12.04.01. Uses sentences of two or more words, such as "We go."
12.04.02. Uses sentences of three or more words, such as "The boy goes."

12.05. Uses long sentences.

12.05.01. Uses sentences of four or more words, such as "When do we go?"
12.05.02. Uses sentences of five or more words such as "The boy goes to school."
12.05.03. Sometimes uses sentences of six or more words such as, "We see the light from here."

12.06. Pronounces words intelligibly.

12.06.01. Does NOT have an accent that makes it difficult to understand his meaning.
12.06.02. Does NOT use baby talk.

12.07. Uses words in correct order in sentences.

- 12.07.01. Generally uses subject before verbs.
- 12.07.02. Generally uses modifiers next to word modified, such as "The black dog ..."

12.08. Asks questions.

- 12.08.01. Asks such questions as, "How do I do it?"

12.09. Answers questions with statements.

- 12.09.01. When asked a question, such as "Where do you live?", answers with a complete statement, such as "I live in a house."

12.10. Uses negatives in sentences.

- 12.10.01. Uses sentences such as, "That color isn't red."

12.11. Uses exclamatory sentences.

- 12.11.01. Uses sentences with emphasis, such as, "That's fun!"

12.12. Uses imperative sentences.

- 12.12.01. Uses sentences with emphasis, such as "Don't bother me!"

12.13. Uses sentences with compound subjects or compound predicates.

- 12.13.01. Uses AND to join two words in sentence.
- 12.13.02. Uses OR to join two words in sentence.

12.14. Uses compound sentences.

- 12.14.01. Uses compound sentences such as, "He is tall and I am short."

12.15. Uses complex sentences.

- 12.15.01. Uses complex sentences such as, "When it's cold, I don't like to go outside."

12.16. Uses correct intonation in sentences.

- 12.16.01. Let's voice fall at end of a sentence.
- 12.16.02. Raises voice at end of question.

12.17. Uses correct verb forms.

- 12.17.01. Uses base form for first and second person singular and third person plural. (We fall.)
- 12.17.02. Usually adds s to base form for third person singular. (He falls.)
- 12.17.03. Uses correct past tense. (He fell.)
- 12.17.04. Uses correct future tense. (We will fall.)
- 12.17.05. Uses present participle. (He is falling.)

12.18. Adds plural endings to nouns correctly.

- 12.18.01. Uses s suffix for regular nouns.
- 12.18.02. Uses irregular plurals correctly, such as leaves or knives.

12.19. Uses contractions correctly.

- 12.19.01. Uses "isn't" correctly. (He isn't NOT They isn't)
- 12.19.02. Uses "they're" correctly. (They're going NOT They's going.)

12.20. Uses possessives correctly.

- 12.20.01. Uses such sentences as, "The dog's house is big, "or "The house of the dog is big."

12.21. Describes using modifiers.

- 12.21.01. Uses adjectives such as red to describe nouns.
- 12.21.02. Uses adverbs such as steadily to describe verbs.
- 12.21.03. Uses the comparative form for adjectives, such as bigger.
- 12.21.04. Uses the superlative form of adjective, such as biggest.

12.22. Uses prepositions in sentences.

- 12.22.01. Uses prepositions in sentences, such as, "We are going to town."

12.23. Uses relative clauses as modifiers.

12.23.01. Uses relative clauses in sentences, such as "My friend who lives next door has a dog."

12.24. Uses participial phrases as modifiers.

12.24.01. Uses participial phrases as modifiers in sentences, such as "The cow standing in the field is brown and white."

Following Directions

13. Carries out a six to eight part verbal direction or performs an activity which requires six to eight actions.

13.01. Responds to simple commands (Dis. 19.01).

13.01.01. (Dis. 19.01.01.)
13.01.02. (Dis. 19.01.02.)

13.02. Carries out a two-part verbal direction.

13.02.01. Follows a direction, such as "Take two blocks and put one on top of the other."
13.02.02. Follows a direction, such as "Use your blue crayon to draw a circle."

13.03. Copies a model requiring a two-part action.

13.03.01. Copies a drawing, such as one in which two lines cross.
13.03.02. Copies a model in which there are three blocks in a row or three blocks stacked on top of each other.

13.04. Follows a sequenced drawing requiring two actions.

13.04.01. Arranges two pictures in the order in which one happened first and the other second.
13.04.02. Carries out the action shown in a series of two pictures, such as (1) three blocks shown arranged in random, (2) three blocks stacked on top of each other.

13.05. Carries out a three-part verbal direction.

- 13.05.01 Follows a direction, such as "Use your crayons to draw first a blue circle and then a red circle."
- 13.05.02. Follows a direction, such as "Make a wall of blocks that is four blocks stacked on top of each other."

13.06. Follows a sequenced drawing requiring three actions.

- 13.06.01. Arranges three pictures in the order in which the events happened.
- 13.06.02. Carries out the action shown in a series of three pictures.
- 13.06.03. Makes something following a blueprint with three sequenced steps.

13.07. Carries out a four-part verbal direction.

- 13.07.01. Follows a direction, such as "Use your crayons to draw a red circle, a blue circle, and a green square."
- 13.07.02. Follows a direction, such as "Find the object hidden under a red book on the bottom shelf of the bookcase by the washroom."

13.08. Copies a model requiring a four-part action.

- 13.08.01. (See 13.03.01.)
- 13.08.02. (See 13.03.02.)

13.09. Follows a sequenced drawing requiring four actions.

- 13.09.01. (See 13.04.01.)
- 13.09.02. (See 13.04.02.)

13.10. Carries out a five-part verbal direction

- 13.10.01. (See 13.05.01.)
- 13.10.02. (See 13.05.02.)

13.11. Copies a model requiring a five-part action.

- 13.11.01. (See 13.03.01.)
- 13.11.02. (See 13.03.02.)

13.12. Follows a sequenced drawing requiring five actions.

13.12.01. (See 13.06.01)
13.12.02. (See 13.06.02.)
13.12.03. (See 13.06.03.)

13.13. Carries out a six-part verbal direction.

13.13.01. (See 13.05.01.)
13.13.02. (See 13.05.02.)
13.13.03. (See 13.07.02.)

13.14. Copies a model requiring a six-part action.

13.14.01. (See 13.03.01.)
13.14.02. (See 13.03.02.)

13.15. Follows a sequenced drawing requiring six actions.

13.15.01. (See 13.06.01.)
13.15.02. (See 13.06.02.)
13.15.03. (See 13.06.03.)

13.16. Carries out a seven-part verbal direction.

13.16.01. (See 13.05.01.)
13.16.01. (See 13.05.02.)

13.17. Copies a model requiring a seven-part action.

13.17.01. (See 13.03.01.)
13.17.02. (See 13.03.02.)

13.18. Follows a sequenced drawing requiring seven actions.

13.18.01. (See 13.06.01.)
13.18.02. (See 13.06.02.)
13.18.03. (See 13.06.03.)

Counting

14. Matches, identifies and prints numerals from 1 to 10. Counts from 1 to 10.

14.01. Counts to ten.

14.01.01. Sings counting song, "one little, two little, etc..."

14.01.02. Recites to ten.
14.01.03. Touches one after another of a series of objects, such as blocks, as he counts to ten.
14.01.04. Understands that the number of the last object he has counted tells how many objects he has counted.

14.02. Counts to twenty.

14.02.01. Recites to twenty.
14.02.02. Touches one after another of a series of objects, such as blocks, as he counts to twenty.

14.03. Counts backward.

14.03.01. Counts backward from ten, as in a rocket blast off.
14.03.02. Counts backward from twenty.

14.04. Knows the "next number" without counting.

14.04.01. For any number from 1 to 10, answers the question, "What number comes after... (two) ?"
14.04.02. For any number from 1 to 20, answers the question, "What number comes after... (fifteen) ?"

14.05. Counts by tens.

14.05.01. Counts by tens to 100--ten, twenty, thirty, etc.

14.06. Counts by fives.

14.06.01. Counts by fives to 100--five, ten, fifteen, etc.

14.07. Counts by twos.

14.07.01. Counts by twos to 20--two, four, six, etc.

14.08. Counts by ordinal numbers.

14.08.01. Counts by ordinal numbers to ten while pointing to series of objects--first, second, third, etc.
14.08.02. Given a series of ten objects, points when asked to the object representing the correct ordinal number--such as, "Which is the third block?"

Understanding Numbers

15. Describes sets and members of sets; joins and separates sets; prints numerals.

- 15.01. Understands the concept of sets.
    - 15.01.01. When a set of objects is described, picks out the members of the set from other objects.
- 15.02. Understands equal sets.
    - 15.02.01. Given pictures of equivalent and non-equivalent sets, draws lines from one equivalent set to another.
    - 15.02.02. Given sets of objects that are both equivalent and non-equivalent, picks out the equivalent sets.
    - 15.02.03. Uses word equal to describe equivalent sets.
    - 15.02.04. Understands symbol = stands for equal.
    - 15.02.05. Plays dominoes.
- 15.03. Understands more (or fewer) in sets.
    - 15.03.01. Given two non-equivalent sets of objects, picks out which is more and which is fewer.
    - 15.03.02. Given two non-equivalent sets of objects, names and points to which is more and which is fewer.
- 15.04. Understands sequence of sets.
    - 15.04.01. Given pictures of sets from 1 to 10, arranges them in sequence from left to right.
    - 15.04.02. Given pictures of sets in sequence from 1 to 10 with several sets missing, inserts missing sets in correct order.
    - 15.04.03. Given pictures of sets from 1 to 10 with several missing, arranges them in sequence leaving spaces for missing sets.
- 15.05. Understands empty set.
    - 15.05.01. Describes a set with no members, such as all the live elephants in his bedroom.
    - 15.05.02. Understands none, not any, zero, or 0, stands for an empty set.
    - 15.05.03. When an empty set is described, names it as zero.

15.06. Counts to 10. (Dis. 14.01.)

15.07. Counts members of sets to 10.

15.07.01. Given any set from 0 to 10, names number of objects in set.

15.08. Reads numerals.

15.08.01. Given three numerals, two of which are the same and one different, picks the one that is different and the two that are the same.
15.08.02. Matches numerals 0 to 10.
15.08.03. Sorts numerals 0 to 10.
15.08.04. Names and points to numerals 0 to 10.

15.09. Matches numerals to sets 0 to 10.

15.09.01. Given sets of objects from 0 to 10, matches correct numeral to each set.
15.09.02. Given a numeral from 0 to 10, constructs a set of objects to correspond to the numeral.

15.10. Understands greater and less in numerals.

15.10.01. Given any two numerals from 0 to 10, names which is greater.
15.10.02. Given any two numerals from 0 to 10, names which is less.

15.11. Understands Addition.

15.11.01. Given two sets of objects, unites the two sets and names how many are in the new set up to 10.
15.11.02. Given two numbers, constructs sets that they represent, unites them, and chooses correct numeral up to 10 that represents new set.
15.11.03. Uses words add and addition to describe uniting sets.
15.11.04. Understands symbol + stands for add or plus.
15.11.05. Uses simple abacus to add.

15.12. Understands Subtraction.

15.12.01. Given a set of objects from 1 to 10, removes a smaller set when asked and then names how many are left in the remaining set.

15.12.02. Given two numerals, constructs set represented by larger numeral, removes subset represented by smaller numeral, and chooses numeral that represents remaining subset.
15.12.03. Uses words take away, subtract, and subtraction to describe removing a subset from a greater set.
15.12.04. Understands symbol - stands for subtract or minus.
15.12.05. Uses simple abacus to subtract.

15.13. Identifies several names for numbers.

15.13.01. Given a numeral from 0 to 10, uses addition to identify other names for the number, such as 8 = 6 + 2.
15.13.02. Given a numeral from 0 to 10, uses subtraction to identify other names for the number; such as 8 = 10 - 2.

15.14. Understands coins.

15.14.01. Matches pennies, nickels, dimes, and quarters.
15.14.02. Sorts pennies, nickels, dimes, and quarters.
15.14.03. When asked points to pennies, nickels, dimes, or quarters.
15.14.04. Names and points to pennies, nickels, dimes, and quarters.
15.14.05. Matches penny, nickel, and dime to correct numerals.
15.14.06. Tells how many cents are in a mixed set of coins.

15.15. Understands Fractions.

15.15.01. Matches halves, thirds, and fourths of objects.
15.15.02. When asked selects 1/2, 1/3, or 1/4 of an object.
15.15.03. Names and selects 1/2, 1/3, or 1/4 of an object.
15.15.04. Identifies 1/2, 1/3, or 1/4 of a set of objects.

15.16. Prints numerals. (Dis. 22.15.02.).

15.16.01. Traces numerals 0 to 10.
15.16.02. Copies numerals 0 to 10.
15.16.03. Prints numerals 0 to 12 without copying.

Telling Time

16. Names basic units of time and reads time on a clock.

16.01. Understands time related concepts. (Dis. 30.00.).

16.02. Understands relationship of time and motion.

- 16.02.01. Names and chooses among pictures that represent fast and slow.
- 16.02.02. Names and chooses among pictures that represent faster and slower.
- 16.02.03. Names and chooses among pictures that represent fast, faster, and fastest.
- 16.02.04. Names and chooses among pictures that represent slow, slower, and slowest.

16.03. Understands how hour glass tells time.

- 16.03.01. Uses an egg-timer to time an event.
- 16.03.02. Names and chooses among pictures of hour glasses that represent before and after.

16.04. Understands how sun dial tells time.

- 16.04.01. Explains relationship of sun to earth in day and at night.
- 16.04.02. Explains how shadows change as relation to sun changes.
- 16.04.03. Explains how shadow or sun dial changes in relation to sun.

16.05. Understands units of time.

- 16.05.01. Names and chooses among year, month, day, hour, minute, and second to represent longer and shorter.

16.06. Understands function of clock hands on watch.

- 16.06.01. Names and distinguishes among hour-, minute-, and and second-hands as moving faster or slower.
- 16.06.02. Names and distinguishes between hour-hand and minute-hand as being longer and shorter.
- 16.06.03. Understands hour-hand tells time in relation to hours.
- 16.06.04. Understands minute-hand tells time in relation to minutes.

16.07. Tells time with hour hand.

- 16.07.01. Reads numerals. (Dis. 15.08.)
- 16.07.02. When hour-hand points to numeral, tells what o'clock the time is.

16.07.03. When hour-hand points between numerals, tells which hour is before and which is after.
16.07.04. When hour-hand points between numerals, tells which hour is nearer and which is farther.
16.07.05. Places hour-hand pointing at correct numeral when told to put it at "...(4) o'clock."
16.07.06. Places hour-hand correctly when told to put it before or after"...(3) o'clock."

16.08. Tells time with minute and hour hands.

16.08.01. Understands there are 60 minutes in an hour.
16.08.02. When minute hand points to numeral, tells how many minutes it shows after the hour.
16.08.03. When minute hand points to numeral, tells how many minutes it shows before the hour.
16.08.04. When minute-hand is between numerals, tells how many minutes after the hour.
16.08.05. When minute-hand is between numerals, tells how many minutes before the hour.
16.08.06. By looking at clock, reads time, "It is ...minutes after ...o'clock," or "It is...minutes before...o'clock."
16.08.07. Times how long an event lasts in minutes.

Measuring

17. Compares weights, volumes, temperatures, and distances.

17.01. Uses terms of length.

17.01.01. Names and chooses among objects, such as rods or pencils, to discriminate long and short.
17.01.02. Names and chooses among objects to discriminate short, shorter, and shortest.
17.01.03. Names and chooses among objects to discriminate long, longer, and longest.
17.01.04. Arranges objects in sequence of lengths from shortest to longest.

17.02. Uses terms of height.

17.02.01. Names and chooses among persons or objects to discriminate tall and short in height.
17.02.02. Names and chooses among persons or objects to discriminate tall, taller, and tallest in height.

17.02.03. Names and chooses among persons or objects to discriminate short, shorter, and shortest in height.

17.02.04. Arranges objects or pictures of persons in sequence of height from shortest to tallest.

17.03. Uses terms of width.

17.03.01. Names and chooses among objects to discriminate wide (or thick) and narrow (or thin).

17.03.02. Names and chooses among objects to discriminate wide, wider, widest, or thick, thicker, thickest.

17.03.03. Names and chooses among objects to discriminate narrow, narrower, narrowest, or thin, thinner, or thinnest.

17.03.04. Arranges objects or pictures of objects in sequence from widest to narrowest, or thickest to thinest.

17.04. Uses terms of size.

17.04.01. Names and chooses among objects to discriminate big, (or large) and little (or small).

17.04.02. Names and chooses among objects to discriminate big, bigger, and biggest, or large, larger, and largest.

17.04.03. Names and chooses among objects to discriminate small, smaller, and smallest, or little, littler, and littlest.

17.04.04. Arranges objects or pictures of objects in sequence from biggest to littlest, or largest to smallest.

17.05. Uses terms of weight.

17.05.01. Names and chooses among objects to discriminate heavy and light.

17.05.02. Names and chooses among objects to discriminate heavy, heavier, and heaviest.

17.05.03. Names and chooses among objects to discriminate light, lighter, and lightest.

17.05.04. Arranges objects in sequence from heaviest to lightest.

17.06. Uses terms of space relationships. (Dis. 29.00.).

17.07. Measures with arbitrary units to nearest whole unit.

17.07.01. Uses own hands to measure length, width or height.

- 17.07.02. Uses own feet to measure length, width, or height.
- 17.07.03. Measures length or height of something against position on own body in comparison of two objects.
- 17.07.04. Measures length, width, or height using a short stick.

17.08. Measures with inches to nearest whole unit.

- 17.08.01. Measures length with inches.
- 17.08.02. Measures width with inches.
- 17.08.03. Measures height with inches.

17.09. Measures weight with balance.

- 17.09.01. Given choice of two pictures of children on a teeter-totter, chooses one that is in balance, when asked.
- 17.09.02. Given a scale out of balance, adds weights to one side to balance it.
- 17.09.03. Uses scale to determine which of two weights is heavier or lighter.
- 17.09.04. Understands that removing part of an object makes it lighter.

17.10. Measures volume or amount.

- 17.10.01. Understands amount of liquid does not change when poured from one container into another.
- 17.10.02. Decides which of two containers holds more or less by pouring liquid from one to the other.
- 17.10.03. Uses empty and full to describe containers. Understands relationship of cup, pint, and quart in liquid measure.
- 17.10.04. Uses inside and outside to describe containers. Measures liquids in cups, pints, and quarts to nearest whole unit.

17.11. Measures temperature.

- 17.11.01. Tells which of two objects is warm or cold by touch. (Dis. 9.0.).
- 17.11.02. Comparing pictures of thermometers, chooses which shows warmer or colder.

17.12. Understands straight line is shortest distance between two points.

- 17.12.01. Measures two paths between two points and tells which is shorter.

17.12.02. Chooses which of two drawn paths between two points is shorter.

17.12.03. When asked to draw shortest path between two points, draws straight line.

Sticking to a Task

18. Persists 15 minutes at a task.

18.01. Demonstrates some persistence in sticking to a task.

18.01.01. Watches TV puppet show for more than 1 minutes without being diverted to something else.

18.02. Demonstrates fair persistence in sticking to a task.

18.02.01. Watches TV puppet show for more than 2 minutes without being diverted to something else.

18.03. Demonstrates good persistence in sticking to a task.

18.03.01. Watches entire 4 to 5 minute TV puppet show without being diverted to something else.

18.04. Has persistence of __ minutes in observing an audio-visual presentation.

18.04.01. Time child for how long he watches without being diverted from a TV show, a movie, a puppet show, or some other a-v presentation.

18.05. Has persistence of __ minutes in listening to an audio presentation.

18.05.01. Time child for how long he listens to without being diverted from a phonograph record or audio tape.

18.06. Has persistence of __ minutes in solving a problem.

18.06.01. Time child for how long he will work at a problem, such as a jig-saw puzzle.

18.07. Has persistence of __ minutes in working on concept formation.

18.07.01. Time how long he will work at matching, sorting, or classifying.

18.08. Has persistence of __ minutes in working with numbers.

18.08.01. Time how long he will work at one of the activities in Counting (14) or Understanding Numbers (15).

18.09. Has persistence in speech activities of __ minutes.

18.09.01. Time how long he will talk in telling a story.

18.10. Has persistence in artistic activities of __ minutes.

18.10.01. Time how long he will work at such an activity as drawing or modeling clay.

18.11. Has persistence in musical activities of __ minutes.

18.11.01. Time how long he will stick to working with a musical instrument.

18.12. Has persistence in making and building activities of __ minutes.

18.12.01. Time how long he will work at such an activity as block building, a construction set, or model making.

18.13. Has persistence in physical activities of __ minutes.

18.13.01. Time how long he will work at a physical exercise or continue with a physical game.

Understanding Rules

19. Makes and follows rules.

19.01. Responds to simple commands. (Dis. 13.01.).

19.01.01. When asked to carry out a single action, he does it; such as, "Please shut the door." (Dis. 13.01.01.).

19.01.02. When asked to carry out a single direction, he does it; such as, "Pick up the book, please." (Dis. 13.01.02.)

19.02. Accepts the authority of an adult to issue commands.

19.02.01. When adult issues a simple command, he carries it out, either without asking "Why?" or after his question is answered.

19.03. Accepts the authority of another child appointed to be in charge.

- 19.03.01. Follows directions of another child giving orders in game, such as "Simon Says."
- 19.03.02. Follows directions of another child leading in game, "Follow the leader."

19.04. Tests rules.

- 19.04.01. When told a rule or given a command, asks, "Why?"
- 19.04.02. When told a rule or given a command, wants to find out what will happen if rule or command is not followed; for example, does not carry out a rule until threatened with a penalty.

19.05. Accepts the need for rules.

- 19.05.01. When asked to play a new game, he asks what the rules are, or how the game is played.
- 19.05.02. After asking "Why?" when a rule or command is given, he carries it out if the reason given is logical.

19.06. Understands and follows the rules for games.

- 19.06.01. Understands and can play a simple game, such as Tick-Tack-Toe.
- 19.06.02. Understands and can play a somewhat more complicated game, such as Candyland.

19.07. Helps makes rules.

- 19.07.01. Joins other children in making rules for a game, such as playing store.
- 19.07.02. Joins in discussion about why rules are needed, such as why there is a rule that toys and materials should be put away after a child is through using them.

19.08. Explains rules.

- 19.08.01. Explains rules of a game to another child or children.
- 19.08.02. Explains about traffic laws to a younger child.

19.09. Understands about local laws.

- 19.09.01. Joins in a discussion about traffic laws and why they are needed.

19.09.02. Demonstrates understanding of stop-and-go signals and other traffic signs.

19.09.03. Joins in a discussion about who makes the city's laws, how they are made, and how they are enforced.

19.10. Understands about state laws.

19.10.01. Joins in discussion about the need for state laws, who makes them, how they are made, and how they are enforced.

19.11. Understands about national laws.

19.11.01. Joins in a discussion about the need for national laws, who makes them, how they are made, and how they are enforced.

19.12. Understands about international rules and laws.

19.12.01. Joins in a discussion about the United Nations, about wars and conflicts between nations, and about treaties between nations.

Tasting and Smelling

20. Compares tastes and smells of common items.

20.01. Distinguishes sweet, sweeter, and sweetest.

20.01.01. Tells by taste which of two objects is sweeter.

20.01.02. Tells by taste which of three objects is sweetest.

20.02. Distinguishes sour, sourer, and sourest.

20.02.01. Tells by taste which of two objects is sourer.

20.02.02. Tells by taste which of three objects is sourest.

20.03. Distinguishes bitter, bitterer, and bitterest.

20.03.01. Tells by taste which of two objects is bitterer.

20.03.02. Tells by taste which of three objects is bitterest.

20.04. Knows common food flavorings by taste.

20.04.01. Tells sugar by taste.

20.04.02. Tells salt by taste.

20.04.03. Tells pepper by taste.
20.04.04. Tells mustard by taste.
20.04.05. Tells cinammon by taste
20.04.06. Tells ketchup by taste.
20.04.07. Tells vanilla by taste.
20.04.08. Tells chocolate by taste.
20.04.09. Tells vinegar by taste.
20.04.10. Tells cloves by taste.

20.05. Knows common fruits by taste.

20.05.01. Tells orange by taste.
20.05.02. Tells lemon by taste.
20.05.03. Tells lime by taste.
20.05.04. Tells apple by taste.
20.05.05. Tells cherry by taste.
20.05.06. Tells grape by taste.

20.06. Knows odors of common flowers.

20.06.01. Tells roses by odor.
20.06.02. Tells coffee by odor.
20.06.03. Tells cinammon by odor.

20.07. Knows odors of common materials.

20.07.01. Tells cedar by odor.
20.07.02. Tells leather by odor.
20.07.03. Tells paint by odor.
20.07.04. Tells moth balls by odor.

Finger Dexterity

21. Controls hand and finger movements, coordinates eyes and hands in a manipulative task.

21.01. Controls opening and closing of hands.

21.01.01. Makes a fist when asked.
21.01.02. Opens and closes fists of each hand.

21.02. Controls bending of individual fingers.

21.02.01. Wiggles one finger at a time.
21.02.02. Bends each finger of each hand at the knuckle.

  21.02.03. Bends each finger of each hand at the second joint.
  21.02.04. With each hand, touches thumb with each finger individually.
  21.02.05. Manipulates hand puppets.
  21.02.06. Manipulates finger puppets.

21.03. Controls spreading of individual fingers.

  21.03.01. Spreads all fingers apart.
  21.03.02. Separates little finger from first three fingers on each hand.
  21.03.03. Separates idex finger from last three fingers on each hand.
  21.03.04. Separates little finger and index finger from middle two fingers on each hand.
  21.03.05. Separates first two fingers from last two fingers on each hand.

21.04. Controls thumb movements.

  21.04.01. Rotates thumb of each hand individually.
  21.04.02. Simultaneously rotates thumbs of both hands clockwise.
  21.04.03. Simultaneously rotates thumbs of both hands counter-clockwise.
  21.04.04. Simultaneously rotates one thumb clockwise and one counter-clockwise.
  21.04.05. Shoots marbles with thumb.

21.05. Grasps well with hands and fingers.

  21.05.01. Grasps well with both hands (Dis. 35.02.).
  21.05.02. Grasps and turns doorknob with one hand.
  21.05.03. Holds a glass of liquid with one hand without spilling.
  21.05.04. Unscrews jar lid.

21.06. Coordinates use of two hands.

  21.06.01. Uses both hands to hold and move an object.
  21.06.02. Alternates use of hands in holding an object, such as a glass or a book.
  21.06.03. Uses one hand to hold an object in place, while the other hand works, as in drawing or hammering.
  21.06.04. Alternates hands in simple tasks, such as pulling a toy or building with blocks.

21.07. Controls use of fingers in drawing and painting.

- 21.07.01. Uses hands and fingers in fingerpainting (Dis. 22.04.).
- 21.07.02. Uses crayons (Dis. 22.05.).
- 21.07.03. Uses watercolor paints and brushes (Dis. 22.06).
- 21.07.04. Uses pencil (Dis. 22.07).
- 21.07.05. Fills in outline drawing with crayons, staying within the lines.
- 21.07.06. Fills in outline drawing with pencil, staying within the lines.
- 21.07.07. Fills in outline drawing with watercolors, staying within the lines.
- 21.07.08. Draws straight lines between dots.

21.08. Controls use of fingers in printing numbers (Dis. 22.15.).

21.09. Controls use of fingers in printing letters (Dis. 22.16.).

21.10. Controls use of fingers in cutting.

- 21.10.01. Cuts out a given figure with scissors, as in a cut-out book.
- 21.10.02. Cuts along a fold produced by folding a piece of paper.
- 21.10.03. Makes paper cutouts of people and animals (Dis. 23.03.01.).

21.11. Controls use of fingers in picking up objects.

- 21.11.01. Picks up small objects, such as pins.
- 21.11.02. Plays game of pick-up-sticks successfully.

21.12. Coordinates eyes and hands in aligning objects.

- 21.12.01. Puts toy train on a track.
- 21.12.02. Lines up blocks or cards in "trains."
- 21.12.03. Places two rods so that marks on each of them are lined up.
- 21.12.04. Pastes cutouts on an outline of the same shape.
- 21.12.05. Sets a dial to a pre-marked position.
- 21.12.06. Places a needle at the beginning of a phonograph record.

21.13. Coordinates eyes and hands in pouring liquids.

- 21.13.01. Pours from and into variously-shaped containers.
- 21.13.02. Pours up to a marked line.
- 21.13.03. Pours from a large container into a smaller one.

21.14. Coordinates eyes and hands in fastening and locking.

    21.14.01. Places key in lock.
    21.14.02. Turns key in lock to open lock.
    21.14.03. Buttons and unbuttons clothing.
    21.14.04. Zippers and unzippers.
    21.14.05. Snaps and unsnaps.
    21.14.06. Hooks and unhooks hook-and-eye.

21.15. Coordinates eyes and hands in threading and lacing.

    21.15.01. Strings beads (Dis. 23.08).
    21.15.02. Threads needle.
    21.15.03. Sews button on piece of cloth (Dis. 23.10.01.).
    21.15.04. Laces and unlaces shoes.
    21.15.05. Ties knots.
    21.15.06. Ties a bow.

21.16. Coordinates eyes and hands in using tools (Dis. 24.00.).

21 17. Coordinates eyes, hands, and mouth in eating.

    21.17.01. Holds fork and spoon comfortably.
    21.17.02. Holds glass and drinks without spilling.

Drawing

22. Describes what a drawing communicates and draws using several media and tools.

22.01. Understands meaning of drawings.

    22.01.01. Identifies objects in a picture (Dis. 1.0.0.).
    22.01.02. Matches solid shapes with pictures of those shapes in different sizes and perspectives (Dis. 10.0.0.).
    22.01.03. When shown picture of an incident or event, tells what is happening in that picture.

22.02. Traces pictures.

    22.02.01. With index finger, traces paths through grooved mazes.
    22.02.02. With pencil or crayon, draws paths through grooved mazes.
    22.02.03. With pencil or crayon, traces finger or design using stencil cutouts.

22.02.04. Traces flat geometric shapes.
22.02.05. Traces pictures of common objects.

22.03. Completes partially-drawn pictures.

22.03.01. Completes dot-to-dot picture to see the whole.
22.03.02. Completes partly finished drawings of animals, persons, or objects.

22.04. Uses fingerpaints.

22.04.01. Mixes colors and puts colors on top of each other.
22.04.02. Experiments with designs and patterns.
22.04.03. Makes handprints with paints.
22.04.04. Uses fingers to make random designs.
22.04.05. Makes conscious designs and patterns.

22.05. Uses crayons. (Dis. 24.04.01.)

22.05.01. Draws lines holding crayon with fingers, rather than with fist.
22.05.02. Sorts basic colors (Dis. 11.0.3.).
22.05.03. Chooses crayons to make specific colors, such as a blue sky.
22.05.04. Exerts variable pressures to make heavy or light marks.

22.06. Uses watercolors.

22.06.01. Paints, holding paintbrush with fingers, rather than with fist.
22.06.02. Sorts basic colors (Dis. 11.0.3.).
22.06.03. Chooses colors for a purpose, rather than indiscriminately.

22.07. Uses pencil. (Dis. 24.02.02.).

22.07.01. Holds pencil with fingers, rather than with fist.
22.07.02. Exerts variable pressures to make heavy or light marks.

22.08. Draws geometric shapes.

22.08.01. Draws a short fairly straight line.
22.08.02. Draws a straight line between two points.
22.08.03. Names basic geometric shapes (Dis. 10.).

22.08.04. Copies geometric shapes, including circle, square, and triangle.
22.08.05. Makes freehand drawings of geometric shapes from memory.
22.08.06. Makes freehand drawing of the American flag.

22.09. Draws figures.

22.09.01. Uses symmetry in drawing people and animals.
22.09.02. Uses stick figures for people and animals.
22.09.03. Uses double lines to show limbs of people and animals.

22.10. Makes representational drawings and paintings.

22.10.01. Copies objects in sight.
22.10.02. Draws recognizable figures and objects from memory.
22.10.03. Includes much detail in drawings and paintings.

22.11. Uses drawing tools.

22.11.01. Draws line using ruler. (Dis. 24.04.03.).
22.11.02. Draws circle using compass. (Dis. 24.04.04.).

22.12. Illustrates ideas.

22.12.01. Makes drawings or paintings based on a given topic or subject.
22.12.02. Makes a series of drawings to tell a story.

22.13. Understands perspective.

22.13.01.
22.13.02.

22.14. Understands design.

22.14.01.
22.14.02.

22.15. Prints numerals.

22.15.01. Reads numerals. (Dis. 15.08.).
22.15.02. Prints numerals.

22.16. Prints letters.

  22.16.01. Reads own name. (Dis. 25.07.).
  22.16.02. Copies printing of own name.
  22.16.03. Knows names of letters. (Dis. 25.05.).
  22.16.04. Prints letters. (Dis. 25.08.).

Making and Building

23. Uses building materials in a variety of ways.

23.01. Builds with blocks.

  23.01.01. Lines blocks in a row.
  23.01.02. Stacks blocks in a straight tower several blocks high.
  23.01.03. Makes structures using walls and towers.
  23.01.04. Makes structures using arches.
  23.01.05. Names a kind of building and then builds it.

23.02. Models with clay.

  23.02.01. Makes figures by squeezing.
  23.02.02. Makes figures by pressing.
  23.02.03. Makes figures by rolling.
  23.02.04. Makes recognizable objects.
  23.02.05. Adds details to figures, such as ears, feet, and so on.

23.03. Cuts and pastes paper.

  23.03.01. Makes paper cutouts of people or animals.
  23.03.02. Pastes collages of pictures and objects.
  23.03.03. Folds paper airplane.
  23.03.04. Makes figures from papier-mache.

23.04. Makes objects with foam plastic.

  23.04.01. Makes ornaments with sequins and pins.
  23.04.02. Makes hand puppet.

23.05. Constructs objects with pipe cleaners.

  23.05.01. Makes people and animals with pipe cleaners.

23.06. Makes objects with plumbing pipe.

  23.06.01. Fits plumbing pipe together to make people and animals.

23.07. Braids yarn.

23.07.01. Makes doll or puppet by braiding yarn.

23.08. Strings beads.

23.08.01. Strings large beads to match pattern.
23.08.02. Strings small beads to make necklace.

23.09. Builds with interlocking construction set.

23.09.01. Builds complex structure following drawings.
23.09.02. Builds furniture using large-size construction set.
23.09.03. Builds toy that moves on wheels.

23.10. Sews

23.10.01. Sews button on piece of cloth.
23.10.02. Makes simple doll or puppet clothes.
23.10.03. Does simple embroidery.

23.11. Builds with cards.

23.11.01. Builds house with two cards.
23.11.02. Builds house with five cards.
23.11.03. Builds two-tier house with seven cards.
23.11.04. Builds three-tier house with sixteen cards.

23.12. Makes models with glue or cement.

23.12.01. Builds simple airplane kit with glue or cement.
23.12.02. Builds simple car kit with glue or cement.

23.13. Builds with cardboard.

23.13.01. Makes wagon from heavy construction cardboard.
23.13.02. Makes something more complicated from heavy construction cardboard using wood-working tools.

23.14. Builds with wood.

23.14.01. Makes box from wood.
23.14.02. Puts together wooden birdhouse kit.

Using Tools

24. Demonstrates the ability to use a variety of tools.

24.01 Uses tools that pound.

24.01.01 Hammers pegs with wooden hammer.
24.01.02 Hammers nails with metal hammer.

24.02 Uses tools that fasten.

24.02.01 Fastens paper with staple-less stapler.
24.02.02 Fastens paper with regular stapler.

24.03 Uses prying tools.

24.03.01 Opens bottle with hand-held bottle opener.
24.03.02 Lifts weight with lever.

24.04 Uses tools to draw.

24.04.01 Draws with crayon (Dis. 22.05).
24.04.02 Draws with pencil (Dis. 22.07).
24.04.03 Draws line using ruler.
24.04.04 Draws circle using compass.

24.05 Uses tools that pinch.

24.05.01 Tightens and loosens nuts with pliers.
24.05.02 Picks up pieces of paper with tweezers.

24.06 Uses tools that twist.

24.06.01 Fastens pipes together with fittings.
24.06.02 Winds toy with key.
24.06.03 Tightens and loosens screws with screw driver.
24.06.04 Locks and unlocks with key.
24.06.05 Clamps with vise.
24.06.06 Tightens and loosens nuts with fixed-opening wrench.
24.06.07 Tightens and loosens nuts with monkey wrench.

24.07 Uses cutting tools.

24.07.01 Cuts paper with scissors.
24.07.02 Sharpens pencil with hand-held pencil sharpener.
24.07.03 Slices with hand-held wire cheese-slicer.

24.07.04 Cores with apple corer.
24.07.05 Peels with potato peeler.
24.07.06 Saws with handsaw.
24.07.07 Removes lid with hand-held can opener.

24.08 Uses rotary tools.

24.08.01 Mixes with rotary beater.
24.08.02 Drills with hand drill.

24.09 Uses tools that smooth.

24.09.01 Smooths wood with sandpaper.
24.09.02 Files wood with rasp.
24.09.03 Planes wood with plane.

24.10 Uses tools to measure.

24.10.01 Measures width and length with ruler.
24.10.02 Measures temperature with thermometer.
24.10.03 Measures weight with scale.
24.10.04 Measures width with calipers.

Knowing the Alphabet

25. Names and prints all letters; reads own name.

25.01 Distinguishes differences in the shapes of letters.

25.01.01 Given two a's and one o, can tell which two are the same and which one is different.
25.01.02 Given two b's and one d, can tell which two are the same and which one is different.
25.01.03 Given two t's and one i, can tell which two are the same and which one is different.

25.02 Matches the letters by shape.

25.02.01 Given two sets of cut-out capital letters, can match the letters in pairs.
25.02.02 Given a chart of the alphabet and a set of cut-out letters, can match the letters to the chart.

25.03 Sorts the letters by shape.

25.03.01 Given three or four sets of cut-out letters, can sort them by shape.

25.04 Knows the order of the alphabet.

- 25.04.01 Arranges the letters of the alphabet in order.
- 25.04.02 Sings the alphabet song.

25.05 Knows names of letters.

- 25.05.01 Points to letters when named.
- 25.05.02 Names and points to letters.

25.06 Knows the sounds of the letters.

- 25.06.01 Points to the consonants when their sounds are given.
- 25.06.02 Points to the vowels when their short sounds are given.
- 25.06.03 Gives the sound for each consonant and points to it.
- 25.06.04 Gives the short sound for each vowel and points to it.
- 25.06.05 Matches letters with pictures of things whose names begin with that sound.
- 25.06.06 Matches letters with pictures of things whose names end with that sound.
- 25.06.07 Matches letters with pictures of things whose names have that sound in the middle.

25.07 Recognizes own name in print.

- 25.07.01 Picks own name in choice between it and a very dissimilar name.
- 25.07.02 Picks own name in choice between it and a similar name.
- 25.07.03 Picks own name from a list of names.

25.08 Prints letters.

- 25.08.01 Traces letters A-Z.
- 25.08.02 Copies letters A-Z.
- 25.08.03 Prints letters A-Z without copying.
- 25.08.04 Prints own name.

Relations With Others

26. Demonstrates friendliness and respect for others and willingness to participate in relating to other children.

26.01 Meets others without unusual shyness.

- 26.01.01 Readily parts from mother.
- 26.01.02 Accepts guidance by an adult other than mother.

26.02 Has a friendly manner.

26.02.01 Smiles when meeting a new acquaintance.
26.02.02 Says "Hello," or offers to shake hands when meeting someone new.
26.02.03 Smiles or laughs at jokes or funny situations.

26.03 Controls emotions.

26.03.01 Accepts reasonable opposition without crying or sulking.
26.03.02 When opposed, does not give way to a temper tantrum.

26.04 Respects rights of others.

26.04.01 Does not "tattle" unnecessarily on other children.
26.04.02 Does not hit or kick other children.

26.05 Shares materials.

26.05.01 If asked by another child, will give him toy or other material.
26.05.02 When asked by an adult, will give a toy or other material to another child.

26.06 Asks permission of others.

26.06.01 Asks permission before taking a toy or other material being used by another child.
26.06.02 Asks adult permission before doing something other children are not doing.

26.07 Waits own turn.

26.07.01 In game with other children, waits to take own turn in order.
26.07.02 Does not interrupt another child to express his own views during a group activity.

26.08 Plays well with other children.

26.08.01 Joins in games with other children.
26.08.02 Freely talks with other children.

26.09 Assumes responsibility.

26.09.01 Helps another child accomplish a task.

26.09.02 Offers to help adult do something.
26.09.03 When asked, willingly carries out a simple chore for an adult.

26.10 Exhibits reasonable competitiveness.

26.10.01 Tries to win at group games.
26.10.02 Does not try to cheat to win at a game.
26.10.03 Does not cry or sulk when he loses at a game.

26.11 Demonstrates politeness.

26.11.01 Usually says, "Please."
26.11.02 Usually says, "Thank you."
26.11.03 Usually says, "You're welcome."
26.11.04 Usually says, "Pardon me."

26.12 Exhibits courtesy.

26.12.01 Does not push and shove when standing in line.
26.12.02 Does not try to bully younger or weaker children.
26.12.03 Stands aside to let an adult go through a door first.

26.13 Joins in group discussions.

26.13.01 Makes own opinions known in group discussion.
26.13.02 Contributes to group discussion on how to do or build something.
26.13.03 Gives reasons for a statement in group discussion.
26.13.04 Gives examples or definitions to support an argument in discussion.

26.14 Speaks to a group of other children.

26.14.01 Tells a group about a favorite toy, vacation, etc.
26.14.02 Tells a simple story to a group.
26.14.03 Describes something to a group, such as his bedroom at home.

26.15 Performs a role in a play.

26.15.01 Acts a part in a pantomime play.
26.15.02 Acts a speaking part in a puppet play with other children.
26.15.03 Acts a speaking part in a "dress-up" play with others.

26.16 Exhibits independence.

26.16.01 Does not come to an adult unnecessarily to solve minor problems.
26.16.02 Makes up own mind without help in solving simple problems.
26.16.03 Persists at a task in the face of difficulties.

Self-Care and Safety

27. Demonstrates good health and safety practices in playing, eating, sleeping, and moving about indoors and outdoors.

27.01 Understands routine cleanliness habits.

27.01.01 Knows to brush teeth regularly.
27.01.02 Knows to wash hands before eating.
27.01.03 Knows to wash hands after using bathroom.

27.02 Dresses and undresses self.

27.02.01 Buttons and unbuttons clothes himself. (Dis. 21.14.03).
27.02.02 Zippers and unzippers. (Dis 21.14.04).
27.02.03 Ties shoelaces in bow knot. (Dis. 21.15.06).

27.03 Understands good eating habits.

27.03.01 Knows eating utensils to use for different foods.
27.03.02 Holds eating utensils comfortably. (Dis. 21.17.01).
27.03.03 Holds glass and drinks without spilling. (Dis. 21.17.02).
27.03.04 Knows why it is important to eat a balanced diet with many kinds of foods, such as meat, vegetables, milk.

27.04 Understands importance of exercise.

27.04.01 Willingly takes part in physical activities.
27.04.02 Explains why exercise is important for health.

27.05 Has good posture.

27.05.01 Stands erect, with shoulders back.
27.05.02 Sits straight, with hips back in chair and feet on the ground.
27.05.03 Balances book on head while walking.
27.05.04 Balances book on head while sitting.

27.06 Understands the importance of sleep.

27.06.01 Understands why sleep is necessary.
27.06.02 Understands that dreams and nightmares are not "real".

27.07 Practices good health habits.

27.07.01 Covers mouth when coughing or sneezing.
27.07.02 Uses clean handkerchief or tissue.

27.07.03 Discards dirty tissues in wastebasket after use.
27.07.04 Indicates lack of fear of doctors by describing a visit to doctor.
27.07.05 Indicates lack of fear of dentists by describing a visit to dentist.

27.08 Takes care of possessions.

27.08.01 Handles materials he uses carefully.
27.08.02 Returns things he borrows.
27.08.03 Puts materials away after using them.
27.08.04 Uses broom and dustpan to clean up.
27.08.05 Shuts off water faucet after using it.

27.09 Understands home safety rules.

27.09.01 Explains symbol for poison on boxes and bottles.
27.09.02 Explains why he should not take pills and other medications from the medicine chest himself.
27.09.03 Explains why he must not put finger into a light socket.
27.09.04 Explains why he should pick toys up from the floor when he is finished playing.
27.09.05 Explains why he should not stand on chairs to reach for things.
27.09.06 Explains why he should not play with sharp objects.

27.10 Understands traffic safety rules.

27.10.01 Knows to look both ways before crossing street.
27.10.02 Understands hand signals of traffic policemen or crossing guards.
27.10.03 Reads red, green, and yellow traffic signals and other traffic signs.
27.10.04 Explains why it is important to wear seat belts in a car.
27.10.05 Knows to ride bicycle or tricycle on sidewalk and not in street.

27.11 Understands water safety rules.

27.11.01 Knows why swimmer should never swim alone.
27.11.02 Tells why swimmer should not go out too far.
27.11.03 Knows to wait at least a half hour after eating before going swimming.
27.11.04 Knows what a lifeguard does.

27.12 Understands outdoor safety rules.

27.12.01 Explains why he should not play with matches or start fires.
27.12.02 Knows why he should not stand under tree in a thunderstorm.
27.12.03 Explains why he should not reach into animal cages when visiting a zoo.

27.13 Knows how to handle self in an emergency.

27.13.01 Knows what to do if lost.
27.13.02 Knows own name, address, telephone number.
27.13.03 Knows mother's and father's first names.
27.13.04 Knows how to dial telephone operator for police or firemen in emergency.

27.14 Understands basic rules of first aid.

27.14.01 Tells why cuts and scratches should be cleaned.
27.14.02 Tells purpose of a bandaid.
27.14.03 Knows how to apply a bandage to a burn or scrape.
27.14.04 Knows to clean an animal bite with soap and water and report it.
27.14.05 Knows to apply cold water or ice to an insect bite.
27.14.06 Knows not to try to move an injured person until a doctor arrives.

Understanding "What?"

28. Identifies body parts, surrounding physical earth features, seasons, weather conditions, animal and vegetable life.

28.00 Recognizes characterisitcs (Dis. 5.00).

28.01 Understands classifying (Dis. 6.00).

28.02 Identifies parts of the human body.

28.02.01 Touches various parts of own body on verbal command.
28.02.02 Names parts of own body while simultaneously touching them.
28.02.03 Names parts of the body of a doll or figure in picture.
28.02.04 Given an incomplete dollor drawing, names the missing parts.

28.03 Identifies parts of the earth and its surroundings.

28.03.01 Names the sky when it is pointed to.
28.03.02 Names the earth when it is pointed to.
28.03.03 Names the sun in a picture.
28.03.04 Names the moon in a picture.
28.03.05 Identifies stars in a picture.

28.04 Understands the seasons of the year.

28.04.01 Knows what autumn is.
28.04.02 Knows what spring is.
28.04.03 Knows what winter is.

28.04.04 Knows what summer is.
28.04.05 Knows what Indian summer is.

28.05 Understands storm terms.

28.05.01 Knows what rain is.
28.05.02 Knows what snow is.
28.05.03 Knows what lightning is.
28.05.04 Knows what thunder is.
28.05.05 Knows what a flood is.
28.05.06 Knows what a rainbow is.

28.06 Understands wind terms.

28.06.01 Imitates the sound of wind.
28.06.02 Knows what a tornado is.
28.06.03 Knows what a hurricane is.

28.07 Understands land terms.

28.07.01 Knows what a mountain is.
28.07.02 Knows what a desert is.
28.07.03 Knows what a volcano is.
28.07.04 Knows what an earthquake is.
28.07.05 Knows what an iceberg is.
28.07.06 Knows what an island is.

28.08 Understands water terms.

28.08.01 Knows what an ocean is.
28.08.02 Knows what a river is.
28.08.03 Knows what a lake is.
28.08.04 Knows what a waterfall is.
28.08.05 Knows what the tide is.

28.09 Understands parts of the atmosphere.

28.09.01 Knows what clouds are.
28.09.02 Knows what dust is.
28.09.03 Knows what fog is.
28.09.04 Knows what makes the sky blue.

28.10 Understands plant life.

28.10.01 Understands that plants are alive.
28.10.02 Knows what roots are.

28.10.03 Knows why most plants need water and light.
28.10.04 Knows how plants grow.
28.10.05 Explains how man uses plants.
28.10.06 Describes different kinds of plants, such as flowering plants, house plants, trees.

28.11 Understands flowers.

28.11.01 From memory names some common flowers, such as: rose, tulip, violet.
28.11.02 Shown a picture of common flowers, names the flower in it.
28.11.03 Names own favorite flower.
28.11.04 Knows common flowers by smell (Dis. 20.06).

28.12 Understands fruits.

28.12.01 Understands that fruits are parts of plants.
28.12.02 From memory, names common fruits he eats.
28.12.03 From picture or reality names common fruits; such as, apple, orange, pear.
28.12.04 Names own favorite fruit.
28.12.05 Knows common fruits by taste (Dis 20.05).

28.13 Understands vegetables.

28.13.01 Understands that vegetables are parts of plants.
28.13.02 From memory, names common vegetables he eats.
28.13.03 From a picture, names common vegetables, such as carrots, peas, celery.

28.14 Understands trees and shrubs.

28.14.01 Knows difference between a tree and a shrub.
28.14.02 Names parts of a tree, such as trunk, branches, leaves.
28.14.03 Knows the names of common trees, such as oak, elm, maple.

28.15 Understands animal life.

28.15.01 Explains how animals help man.
28.15.02 Names two animals that help man.
28.15.03 Explains how animals may harm man.
28.15.04 Names two animals that may harm man.
28.15.05 From a picture, names common parts of an animal, such as legs, paws, claws, tail.

28.16 Understands zoo animals.

28.16.01 From a picture, names common zoo animals; such as, elephant, giraffe, tiger.
28.16.02 Names the animal that has a long trunk and big, floppy ears.
28.16.03 Names the animal that swings from a tree and has a long tail.
28.16.04 Names the animal that has stripes all over its body.

28.17 Understands animal pets.

28.17.01 Names three kinds of animals people keep as housepets.

28.18 Understands farm animals.

28.18.01 From a picture, names common farm animals.
28.18.02 From memory, tells names of common farm animals.
28.18.03 Knows what a cow is used for.
28.18.04 Knows what chickens are used for.
28.18.05 Knows what sheep are used for.
28.18.06 Knows what horses are used for.
28.18.07 Knows what dogs are used for.

28.19 Understands birds.

28.19.01 From a picture, names different parts of a bird, such as wings, beak, legs.
28.19.02 Knows that birds use their wings for flying.
28.19.03 From memory, names common birds, such as sparrow, bluebird, eagle.

28.20 Understands insects.

28.20.01 Knows how insects help man.
28.20.02 Knows how insects harm man.
28.20.03 From a picture, names common in sects, such as fly, bee, spider, ladybug.

28.21. Understands fish.

28.21.01 Knows that fish live in water.
28.21.02 Knows how fish breathe in water.
28.21.03 From a picture, names parts of a fish, such as fins and scales.
28.21.04 Names common fish that people eat.

28.22 Understands basics of astronomy.

28.22.01 Knows that the earth is round.
28.22.02 Knows relation of earth to sun.
28.22.03 Knows relation of earth to moon.
28.22.04 Knows what a "falling star" is.
28.22.05 Knows difference between a star and a planet.
28.22.06 Names the planets.

Understanding Where

29. Uses prepositions to describe where objects are and uses spatial clues to locate objects.

29.01 Identifies and uses spatial terms through action.

29.01.01 When asked, is able to take object and place it in a box.
29.01.02 When asked, is able to take object and place it on a box.
29.01.03 When asked, is able to take object and place it over a box.
29.01.04 When asked, is able to take object and place it beside a box.
29.01.05 When asked, is able to take object and place it between two other boxes.
29.01.06 When asked, is able to take object and place it under a box.
29.01.07 When asked, is able to pick out the block (from a stack of blocks) that is high and the block that is low.
29.01.08 Finds where an object is in terms of its position in relation to other objects (next to, near, under, on, in, etc.).

29.02 Identifies and uses spatial terms by verbalizing.

29.02.01 Tells where an object is by stating its position in relation to other objects, such as next to.
29.02.02 Tells where an object is by stating the word near.
29.02.03 Tells where an object is by stating the word under.
29.02.04 Tells where an object is by stating the word on.
29.02.05 Tells where an object is by stating the word in.
29.02.06 Tells where an object is by stating the word over.
29.02.07 Tells where an object is by stating the word between.

29.03 Finds hidden objects.

29.03.01 Finds hidden object when given a spatial clue such as, under, near, next to, etc.
29.03.02 Finds hidden toy by asking twenty questions.
29.03.03 Finds hidden toy when shown simple map of room and picture of the toy.

- 29.04 Understands directional terms, right and left.
    - 29.04.01 Shows the correct right or left arm or leg in response to a command.
    - 29.04.02 Points to the correct right or left body part (eye, ear) in response to a command.
    - 29.04.03 Turns to the left or right on command.
    - 29.04.04 Points to the right or left body part of another person.
    - 29.04.05 Points to the right or left side of room or area.
    - 29.04.06 Points to right or left glove and shoe.
- 29.05 Understands directional terms right and left used with pictures.
    - 29.05.01 Points to right or left side of printed page.
    - 29.05.02 Points to right or left hand and leg of picture of person.
    - 29.05.03 Points to right or left position on a page (ex: What is to the left of, right of this picture?)
- 29.06 Reproduces a pattern.
    - 29.06.01 Shown a group of objects arranged in order (series of beads), reproduces the pattern of beads.
    - 29.06.02 Shown a group of objects arranged in a pattern (series of beads), draws a picture depicting that pattern.
    - 29.06.03 Shown a picture of objects arranged in a pattern, draws a picture reproducing that pattern.
- 29.07 Understands locations.
    - 29.07.01 Points to N, S, E, W on compass.
    - 29.07.02 Names compass directions.
    - 29.07.03 Uses compass to determine direction.
    - 29.07.04 Turns body to compass point directions.
    - 29.07.05 Uses globe to point to major continents.
- 29.08 Identifies objects in spatial perspective.
    - 29.08.01 Matches objects with pictures of those objects in varying perspectives.
    - 29.08.02 Matches drawing of objects with picture of those objects in varying perspectives.
    - 29.08.03 Points to object imbedded in picture of that object.
    - 29.08.04 Points to picture of an object imbedded in a picture of that object.
- 29.09 Uses spatial clues to judge things.
    - 29.09.01 Predicts which puzzle pieces will fit puzzle without trial and error attempts.

29.09.02 Predicts which cut up pieces of a drawing will fit to produce a picture that is shown.
29.09.03 Points to shortest route between two points.

Understanding "When?"

30. Estimates time and places events in a time sequence.

30.01 Understands differences in ages.

30.01.01 Chooses younger or older among persons.
30.01.02 Names and chooses younger or older among persons.
30.01.03 Names and chooses younger or older among pictures of animals.
30.01.04 Gives own age in years.

30.02 Understands before and after.

30.02.01 Given pictures of two events, chooses which came before and which after.
30.02.02 Given pictures of two events, names and chooses which came before and which after.

30.03 Understands now, soon, and later.

30.03.01 Chooses among forthcoming events related to self as to which will happen now, soon, or later. For example, lunch, dinner and bedtime.

30.03.02 Names and chooses now, soon, or later among forthcoming events related to self.

30.04 Understands day and night.

30.04.01 Chooses among pictures events that happened in the day or at night.
30.04.02 Names whether pictures represent events that happened in the day or night.

30.05 Understands yesterday, today, and tomorrow.

30.05.01 When asked names events related to self that happened or will happen yesterday, today, and tomorrow.
30.05.02 Uses words yesterday, today, and tomorrow to describe events related to self.

30.06 Understands *morning*, *afternoon*, and *evening*.

30.06.01 Chooses among pictures events that happened in the *morning*, *afternoon* or *evening*.
30.06.02 Names and chooses among pictures of events that happened in the *morning*, *afternoon*, or *evening*.

30.07 Understands days of week.

30.07.01 Recites days of week in order.
30.07.02 Names days that come *before* and *after* another day of week.
30.07.03 Names day of week for *yesterday*, *today*, and *tomorrow*.

30.08 Understands the four seasons.

30.08.01 Recites four seasons in order.
30.08.02 Chooses pictures representing each of the four seasons.
30.08.03 Names and chooses pictures for each of the four seasons.
30.08.04 Arranges pictures of four seasons in order.
30.08.05 Names seasons for *now*, *before*, and *after*.

30.09 Understands months of year.

30.09.01 Recites months of year in order.
30.09.02 Names months that come *before* or *after* another month.
30.09.03 Names months for *this month*, *last month*, and *next month*.

30.10 Understands *past*, *present*, and *future*.

30.10.01 Chooses from among pictures events representing *past*, *present*, and *future*.
30.10.02 Names pictures of events as *past*, *present*, and *future*.
30.10.03 Arranges pictures of events in sequence of *past*, *present*, and *future*.

30.11 Arranges events in time sequence.

30.11.01 Given three objects to hide, tells which he hid *first*, which *second*, and which *third*.
30.11.02 After hearing a story, tells what was the *beginning*, what was the *middle*, and what was the *end*.
30.11.03 Arranges pictures in order from left to right to tell sequence of events.
30.11.04 Retells a story, remembering events in correct sequence.

30.12 Discriminates differences in duration of time.

30.12.01 Correctly discriminates among events as to whether they are short or long.

30.13 Understands relationship of time and distance.

30.13.01 Understands relationship of time and motion. (Dis 16.02.)
30.13.02 Times duration of an event in minutes. (Dis 16.08.07.)
30.13.03 Discriminates slow, slower, and slowest in relation to things moving over a specific distance, such as model racing cars.
30.13.04 Discriminates fast, faster, and fastest in relation to things moving over a specific distance.
30.13.05 Uses speed to describe how fast or slow something moves.
30.13.06 Understands speed is a function of time and distance.

Understanding "Why?"

31. Explains a cause behind a natural event or effect.

31.01 Understands cause and effect.

31.01.01 Given a sequence of cards depicting a cause and effect, arranges cards in appropriate order.
31.01.02 Given a cause in a story, states the effect. (Example: Three Little Pigs. Wolf blew on the house of straw, so it fell down.)
31.01.03 Given a cause, states the probably effect. (A bottle of ink poured into a bottle of water will make the water dark.)
31.01.04 Given an effect, states the probable cause. (A broken mirror; someone dropped it.)

31.02 Uses logical relation words. (Dis 7.01.)

31.03 Understands causes in plant life.

31.03.01 Knows why plants need water.
31.03.02 Knows why plants need sunlight.
31.03.03 Knows why the grass is green.

31.04 Understands causes in animal life.

31.04.01 Knows why bees sting.
31.04.02 Knows why birds build nests.
31.04.03 Knows why spiders build webs.

31.05 Understands causes in human life.

31.05.01 Knows why people have to eat.
31.05.02 Knows why it is important to eat a balanced diet. (Dis. 27.03.04.)
31.05.03 Knows why people have to sleep. (Dis 27.06.)
31.05.04 Knows why people need water.
31.05.05 Knows why people have to breathe.
31.05.06 Knows why babies can't walk or talk.

31.06 Understands causes in the weather.

31.06.01 Knows why it rains.
31.06.02 Knows why it thunders.
31.06.03 Knows why the sky is blue.
31.06.04 Knows why the sun shines.
31.06.05 Knows why the wind blows.

31.07 Understands changes in the four seasons.

31.07.01 Knows why leaves grow in spring.
31.07.02 Knows why leaves fall from trees in autumn.
31.07.03 Knows why it snows in winter.

31.08 Understands basic of gravity.

31.08.01 Knows why things fall down.
31.08.02 Knows why water runs downhill.
31.08.03 Knows why he can't walk on the ceiling.

31.09 Understands causes in natural phenomenon.

31.09.01 Knows why the ocean is salty.
31.09.02 Knows why mountains have snow on their peaks.
31.09.03 Knows why fire burns.
31.09.04 Knows why food spoils.

31.10 Understands causes in astronomy.

31.10.01 Knows why the stars shine.
31.10.02 Knows why the moon changes shape and size.
31.10.03 Knows why the earth doesn't fall down.

Understanding "How?"

32. Observes and describes how two or more actions or occurrences relate after viewing a demonstration.

32.01 Understands cause and effect. (Dis. 31.01.)

32.02 Understands how things freeze.

32.02.01 Knows that cold changes liquids into solids, such as water into ice.
32.02.02 Knows how ice cream is made.
32.02.03 Knows how meats and vegetables can be frozen.

32.03 Understands how things melt.

32.03.01 Knows that heat changes solids into liquids, such as ice into water.
32.03.02 Knows how to melt wax crayons.
32.03.03 Knows how to melt chocolate.

32.04 Understands how simple machines work.

32.04.01 Knows how a lever works.
32.04.02 Knows how an inclined plane makes work easier.
32.04.03 Knows how pulleys work.
32.04.04 Knows how a wedge works.
32.04.05 Knows how the screw does work as a machine.
32.04.06 Knows how the wheel and axle work.

32.05 Understands how electricity works.

32.05.01 Knows how a light switch works.
32.05.02 Knows how a flashlight works.
32.05.03 Knows how to use battery-operated toys.
32.05.04 Knows how to put together an electric circuit.

32.06 Understands how machines around the house work.

32.06.01 Knows how a water faucet works.
32.06.02 Knows how a carpet sweeper works.
32.06.03 Knows how a vacuum cleaner works.
32.06.04 Knows how a washer works.
32.06.05 Knows how a dryer works.
32.06.06 Knows how a toaster works.
32.06.07 Knows how a coffee maker works.
32.06.08 Knows how various can openers work.

32.07 Understands how timepieces work.

32.07.01 Knows how a sundial works.
32.07.02 Knows how an hour glass works.
32.07.03 Knows how a clock works.

32.08 Understands how communication machines work.

32.08.01 Knows how a telephone works.
32.08.02 Knows how a tape recorder works.
32.08.03 Knows how a television set works.
32.08.04 Knows how a camera works.

32.09 Understands how farm machines work.

32.09.01 Knows how a windmill works.
32.09.02 Knows how a tractor works.
32.09.03 Knows how a plow works.
32.09.04 Knows how a milking machine works.

32.10 Understands how business machines work.

32.10.01 Knows how a typewriter works.
32.10.02 Knows how a computer terminal works.

32.11 Understands how medical instruments work.

32.11.01 Knows how a stethoscope works.
32.11.02 Knows how a thermometer works.
32.11.03 Knows how an X-ray machine works.

32.12 Understands how scientific instruments work.

32.12.01 Knows how a magnet works.
32.12.02 Knows how a magnifying glass works.
32.12.03 Knows how a microscope works.
32.12.04 Knows how a telescope works.

32.13 Understands how engines and motors works.

32.13.01 Knows how gears transmit power.
32.13.02 Knows how a water wheel works.
32.13.03 Knows how a steam engine works.
32.13.04 Knows how an electric motor works.

32.14 Understands how machines that run on land work.

32.14.01 Knows how a bicycle works.
32.14.02 Knows how a motorcycle works.

32.14.03 Knows how an automobile works.
32.14.04 Knows how a railroad train works.
32.14.05 Knows how a roller coaster works.

32.15 Understands how machines that run on water work.

32.15.01 Knows how a row boat works.
32.15.02 Knows how a motor boat works.
32.15.03 Knows how a sailboat works.
32.15.04 Knows how a submarine works.

32.16 Understands how things fly.

32.16.01 Knows how a kite works.
32.16.02 Knows how a balloon works.
32.16.03 Knows how a parachute works.
32.16.04 Knows how an airplane works.
32.16.05 Knows how a helicopter works.
32.16.06 Knows how a rocket works.

32.17 Understands how engineering structures work.

32.17.01 Knows how a tunnel works.
32.17.02 Knows how a bridge works.
32.17.03 Knows how a drawbridge works.
32.17.04 Knpws how a dam works.

32.18 Understands how transportation systems work.

32.18.01 Knows how a railroad works.
32.18.02 Knows how an airport works.

Understanding People

33. Describes how people differ in terms of physical features, personalities, roles in a family, place where they live, dress, occupations, hobbies, language, religion, and politics.

33.01 Understands same and different in people.

33.01.01 Understands words same and different. (Dis. 5.01.)
33.01.02 Understands that people are the same in some ways and different in other ways.

33.02 Understands that people have physical differences.

33.02.01 Describes differences in skin color.

33.02.02 Describes differences in height.
33.02.03 Describes differences in weight (fat, thin).
33.02.04 Describes differences in eye color.
33.02.05 Describes differences in hair color.
33.02.06 Describes differences in hair length and shape (long or short, straight or curly).

33.03 Understands that people have differences in personality.

33.03.01 Tells what it means to be shy and names someone he knows who is shy.
33.03.02 Tells what it means to be friendly and names someone he knows who is friendly.
33.03.03 Shows how someone acts when he is happy.
33.03.04 Shows how someone acts when he is sad.

33.04 Understands differences in family roles.

33.04.01 Given a representative picture, including a mother or father, identifies the role being depicted.
33.04.02 Play-acts the role of a father, a mother, a sister, a brother.
33.04.03 Knows what grandparents are.
33.04.04 Knows what an aunt is.
33.04.05 Knows what an uncle is.
33.04.06 Knows what a cousin is.

33.05 Understands that people live in different places.

33.05.01 Names three countries that people live in.
33.05.02 Knows what a city is.
33.05.03 Knows what a suburb is.
33.05.04 Knows what a farm is.
33.05.05 Knows what a ranch is.

33.06 Understands that people live in different kinds of houses.

33.06.01 Knows what a private house is.
33.06.02 Knows what an apartment house is.
33.06.03 Knows what a walk-up is.
33.06.04 Knows what a hut is.
33.06.05 Knows what an igloo is.

33.07 Understands that people dress differently.

33.07.01 Describes kinds of clothes people in cold climates wear.
33.07.02 Describes kinds of clothes people in warm climates wear.

33.07.03 Describes kinds of clothes people wear to dress up and kind they wear to play in.
33.07.04 Knows what a costume is and gives reasons for wearing one.

33.08 Understands that people eat different kinds of food.

33.08.01 Tells what own favorite foods are.
33.08.02 Tells what kinds of foods are eaten on different holidays, such as Thanksgiving or Christmas.
33.08.03 Names some national or ethnic dishes that people eat, such as Italian spaghetti or Chinese Chop Suey.

33.09 Understands that people have different occupations.

33.09.01 Explains what a teacher does.
33.09.02 Explains what a storekeeper does.
33.09.03 Explains what various community helpers do, such as policeman and fireman.
33.09.04 Explains what a librarian does.
33.09.05 Explains what a doctor does.
33.09.06 Explains what a dentist does.
33.09.07 Explains what a nurse does.
33.09.08 Explains what a farmer does.
33.09.09 Tells occupation of father or mother.

33.10 Understands that people work in different kinds of buildings.

33.10.01 Knows what a skyscraper is.
33.10.02 Knows what a bank is.
33.10.03 Knows what a courtroom is.
33.10.04 Knows what a hospital is.
33.10.05 Knows what a theater is.
33.10.06 Describes where father or mother works.

33.11 Understands that people have different hobbies.

33.11.01 Names own hobby, if has one, or hobbies of members of his family.
33.11.02 Names three hobbies that people have, such as stamp collecting, photography, making things.

33.12 Understands that people enjoy different kinds of recreation.

33.12.01 Names some sports that people like to take part in.

33.12.02 Names some sports that people like to watch, such as baseball or football.
33.12.03 Describes different kinds of entertainment people enjoy such as movies, theater, museums.

33.13 Understands that people speak different languages.

33.13.01 Knows that the language he speaks is English.
33.13.02 Names foreign languages other people speak.

33.14 Understands that people have different religious beliefs.

33.14.01 Names two holidays that Christians celebrate, such as Christmas and Easter.
33.14.02 Names two holidays that Jews celebrate, such as Hanukkah and the Jewish New Year.
33.14.03 Knows the difference between a church and a synagogue.
33.14.04 Knows the difference between a priest, minister, and rabbi.

33.15 Understands that people have different political beliefs.

33.15.01 Knows that Americans vote for political leaders.
33.15.02 Knows that people belong to political parties.
33.15.03 Knows the terms Democrat and Republican.

Making Sounds and Music

34. Reproduces vocal and instrumental sounds and rhythms.

34.01 Demonstrates awareness of musical rhythm. (Dis. 2.09.)

34.02 Matches musical reference tones with voice.

34.02.01 Sings with a group.
34.02.02 Matches voice to do-re-mi of teacher.
34.02.03 Matches voice to a note on a pitch pipe.

34.03 Makes tones in a sequence with voice.

34.03.01 Hums an ascending scale of eight notes, or hums a tune.
34.03.02 Hums a descending scale, or hums a tune.

34.04 Manipulates simple voice modulated musical instrument.

34.04.01 Hums a tune on a kazoo, or hums a tune with a comb and a piece of paper.

34.05 Varies voice in musical sequence without aids.

34.05.01 Sings a song without music or others singing.
34.05.02 Sings a complete do-re-me-fa-so-la-te-do.

34.06 Keeps rhythm with fine movements.

34.06.01 Snaps fingers in rhythm to music, or ripples finger tips on flat surface in time with music.

34.07 Produces without voice a musical sequence using tongue and lips.

34.07.01 Whistles or clucks several notes forming a musical scale, or tune.

34.08 Shows knowledge of some musical sound properties. (Dis. 2.10.)

34.09 Understands some aspects of musical terminology.

34.09.01 Names notes of the musical scale A to G and does not add H.
34.09.02 Knows which marks indicate musical note on a music score.
34.09.03 Knows that "sharps" and "flats" are in between other notes.

34.10 Understands basics of how simple musical instruments work.

34.10.01 Plays the scale on any of the following: xylophone, harmonica, recorder or flute, or piano.
34.10.02 Can describe how you obtain different notes on a guitar, or violin, and on a trumpet, clarinet or saxophone.

34.11 Plays some simple musical instrument.

34.11.01 Plays a tune on a xylophone, or a recorder or any conventional musical instrument.

Physical Coordination

35. Balances and controls gross motor activities.

35.01 Coordinated arms and legs.

35.01.01 Does jumping-jack.
35.01.02 Plays leap frog.
35.01.03 Skips.

- 35.02 Grasps well with both hands.
  - 35.02.01 Plays tug of war.
  - 35.02.02 Hangs by hands from chinning bar.

- 35.03 Coordinates motion of arms and hands in opposite directions.
  - 35.03.01 Rubs stomach with one hand while patting top of head with other.
  - 35.03.02 With arms extended, moves one arm in circle clockwise while other arm moves in circle counterclockwise.

- 35.04 Coordinates different motions of arms and legs.
  - 35.04.01 Kicks with one leg while patting top of head with one hand and rubs stomach with other hand.
  - 35.04.02 Skips rope.

- 35.05 Exercises breath control.
  - 35.05.01 Holds breath for ten seconds.
  - 35.05.02 Blows up toy balloon.

- 35.06 Controls body movement.
  - 35.06.01 Follows leader on path between objects without touching them.
  - 35.06.02 Follows leader on path between two lines without stepping outside them.

- 35.07 Coordinates eyes, hands, and arms.
  - 35.07.01 Throws ball with one hand to catcher.
  - 35.07.02 Catches ball with one hand.
  - 35.07.03 Rolls ball to target.
  - 35.07.04 Hits target with dart.
  - 35.07.05 Bounces ball repeatedly with one hand.

- 35.08 Balances.
  - 35.08.01 Stands on toes for several seconds.
  - 35.08.02 Hops on one leg.
  - 35.08.03 Walks heel-and-toe along a narrow board.
  - 35.08.04 Stands on head.
  - 35.08.05 Walks heel-and-toe along a line with book balanced on head.

35.09 Exhibits arm muscle strength.

35.09.01 Does push-up.
35.09.02 Does chin-up.

Reading Abbreviations

Vis. D.	Visual Discrimination
Aud. D.	Auditory Discrimination
Lit. C.	Literal Comprehension
Int. C.	Interpretive Comprehension
Eval. C.	Evaluative Comprehension
Lib. S.	Library Skills
Rel. R.	Related Reading
Voc. D.	Vocabulary Development
Ref. S.	Reference Skills
Str. A.	Structural Analysis
Org. S.	Organization Skills

READING

Level A

Vis. D.	Identifies similarities and differences in objects and pictures; identifies size differentials.
Vis. D.	Identifies and names letters of the alphabet. Identifies groups of letters that form words.
Vis. D.	Identifies names and matches the basic colors.
Aud. D.	Identifies familiar vocal and nonvocal sounds. Selects rhyming words as read by teacher or shown in pictures.
Lit. C.	Associates words and pictures that are related. Describes several characteristics of an object.
Lit. C.	Responds after two directions are stated orally.
Int. C.	Arranges pictures in a logical sequence and gives orally the story presented. Interprets a story orally.
Eval C.	Completes an unfinished picture and marks what is wrong with a given picture.
Lib. S.	Responds by pointing to "title" or "word" in or on a book. Tells a story orally from a picture book.
Rel. R.	Traces or copies numbers, letters, and figures using correct pencil position. Identifies left and right, top and bottom on a page.
Rel. R.	Classifies pictured objects into broad categories.

Level B

Aud. D.	Identifies words beginning with short a, f, m, p, t from pictures. Gives orally words that rhyme with a word presented orally.
Voc. D.	Responds orally to printed McGraw-Hill Primer and Book 1 words and first 100 words on Dolch list. Uses them in sentences.
Lit. C.	Follows simple printed directions.
Lit. C.	Recalls events of a story orally and locates answers to questions in the text. Completes sentences with correct word in writing.
Int. C.	Tells a story from a picture series and describes the mood of a story listened to. Predicts or explains the outcome.
Eval C.	Identifies irrelevant ideas in a picture series or a paragraph.
Lib. S.	Locates the title and the author on a book cover. Moves finger left to right under a sentence in a book.
Ref. S.	Arranges alphabet in sequence.
Ref. S.	Marks the picture that defines a given word.
Rel. R.	Begins sentences with capital letters and ends them with . or ?

Level C

Aud. D.	Names letter heard at beginning or end of any word given orally.
Str. A.	Identifies and writes root words, singular and plural forms of regular roots, and contractions.
Voc. D.	Identifies in print simple synonyms, antonyms, and rhyming words. Uses context clues to define words.
Lit. C.	Matches words that form an associative pair.

Lit. C.	Writes answers to questions from a story by memory or by copying. Lists the main characters.
Int. C.	After reading a selection, orders sentences logically, predicts what might happen next, identifies main idea and mood conveyed by author.
Eval. C.	After reading a selection, states the author's purpose, and predicts from multiple choices what might happen next.
Eval. C.	Describes a picture in writing or draws a picture of a story.
Lib. S.	Uses the table of contents to locate titles and pages. Identifies a book as fiction or nonfiction.
Ref. S.	Alphabetizes groups of three to five letters.
Rel. R.	Identifies proper names as those words capitalized within a sentence.

Level D

Aud. D.	Identifies initial and internal vowel sounds of words given orally where the vowel is long or short.
Str. A.	Marks root words and adds endings -'s (possessive), -ing, -ed, -s where root is unchanged. Identifies and forms contractions.
Str. A.	Marks silent vowels and consonants. Forms plurals of words ending in -ch, -x, -sh.
Voc. D.	Identifies consonant blends presented orally or in writing.
Voc. D.	Defines words by associating a picture or using the word in a sentence.
Lit. C.	Recalls main facts and events of a story.
Int. C.	Locates answers, describes moods, selects main ideas, recounts events, and explains cause and effect relationships in short selection.
Eval. C.	Orders events and explains what might happen next in a paragraph or story.
Lib. S.	Uses the table of contents to find specific information. Locates fiction and nonfiction books on a library shelf.
Ref. S.	Differentiates vowels and consonants. Alphabetizes 3 to 4 words by their first letter. Uses the table of contents to find where a story begins.

Level E

Str. A.	Forms and identifies compound words. Counts syllables. Adds the endings -ing, -ed, -er, -ly, -est to words where the root changes.
*Voc. D.	Identifies synonyms for words used in sentences. Defines words in sentences where the meaning is given as part of the sentence. (12)
Voc. D.	Distinguishes between words that name groups and words that name members of groups.
Lit. C.	Answers questions based on factual or fictional selections.
Lit. C.	Defines the author's purpose and deletes extraneous material from a paragraph.
Int. C.	In a given selection, sequences the main events, identifies cause and effect relationships, predicts future events, and describes the physical appearance of characters.
*Int. C.	Identifies alliteration. (17)
Eval C.	Selects words and phrases that support the stated purpose of the author. Determines if a selection deals with reality or fantasy.
Lib. S.	Differentiates between fiction and nonfiction books on a library shelf. Defines the purpose of the encyclopedia by locating specific information.

3

*Ref. S.	Answers question by referring to a table of contents and main and subtopics of an index. (28)
Ref. S.	Alphabetizes to the third letter of a word. Identifies entry words and guide words in a dictionary. Locates words in a dictionary and defines their meanings.

Level F

Str. A.	Adds suffixes (-er, -or, -ist, -ian, -ly, and -less) and prefixes (out-, over-, self-, under-, and up) to root words. Identifies the roots. Divides two syllable words into parts and marks the accents.
Voc. D.	Identifies antonyms used in a sentence. Identifies implied meanings in a sentence.
Lit. C.	Answers factual questions based on informative selections. States main idea of a short selection.
Int. C.	Identifies phrases that describe a character's reactions. Identifies exaggerations.
Int. C.	Draws conclusions. Sequences actions portrayed in a selection.
Eval.C.	Identifies and gives evidence of an author's purpose for writing.
Eval.C.	Gives details that are relevant to a specific topic or that support a conclusion.
Lib. S.	Locates a specific topic or needed information in an encyclopedia.
Ref. S.	Uses a dictionary to locate words, multiple meanings, and phonetic spellings. Distinguishes between a glossary and a dictionary.
Org. S.	Orders scrambled sentences. Selects a topic sentence for a paragraph.
Org. S.	Selects situations where use of an outline would be helpful. Completes a simple outline.

Level G

*Str. A.	Uses suffixes (-ness, -ment, -ship, -ion) and prefixes (non-, dis-, un-, mis-, in-) to form new words. Marks accents on words with prefixes. Divides words ending in -le into syllables. (6, 7)
*Voc. D.	Uses context clues to write correct homonym and to define a word where the meaning is implied but not stated.(10)
*Lit. C.	Executes printed directions where instructions are written in his vocabulary. (4)
Lit. C.	Answers questions from factual and fictional selections in timed and untimed situations. States the main idea of a short selection.
Int. C.	Selects words and phrases that identify a character's physical appearance and emotional state. Identifies cause-and-effect relationships and predicts outcomes in a story.
Int. C.	Identifies and forms similes.
Eval C.	States and supports statement of author's purpose. States a conclusion based on evidence.
*Lib. S.	Uses subheadings and cross references in an encyclopedia to locate specific information. Locates call numbers of a book in a card catalogue. (27)
Ref. S.	Uses index and key to index to find specific information. Uses the dictionary to find singular and plural spellings. Explains the function of a preface.
Ref. S.	Alphabetizes names, titles, and compound words.

9-D

Org. S.	Selects the topic sentence in a paragraph. Lists specific details that support the main idea in a selection. Constructs a simple outline.

Level H

*Str. A.	Identifies roots of and uses words ending in able, ible, ful, ous, less. (7)
Str. A.	Syllabifies words in 3 or more syllables and marks with primary or secondary accents.
*Voc. D.	Identifies the meanings of homographs when used in context. Defines words where meaning is implied but not stated. (11)
Lit. C.	States main idea. Answers questions based on implications in timed and untimed situations.
Int. C.	Describes the characters as to personality traits and actions and reactions. Identifies and states the plot.
Int. C.	Unscrambles and orders sentences in a logical sequence.
Int. C.	Identifies and forms similies in prose.
Eval.C.	Lists evidence to support conclusions. Lists specific ideas that define general statements. Differs between statements of fact and opinion.
*Lib.S.	Arranges library book titles by the Dewey Decimal System. Locates bibliographic information in the card catalogue. (27)
Lib. S.	Differentiates between use of the abridged and unabridged dictionary. Uses cross references in an encyclopedia to locate information.
Ref. S.	Uses correct bibliographic form. Uses dictionary to identify parts of speech.
Org. S.	Arranges a group of paragraphs in sequential order. Constructs an outline of three to four main headings.

Level I

*Str. A.	Defines and uses endings (en.-ize,-ify,-ate) and prefixes (sub-, circum-, super-, inter-, trans-, intra-,).(6, 7)
Voc. D.	Uses antonyms, synonyms and homonyms in sentences. Defines words used in sentences where meaning is implied but not stated.
Lit. C.	Selects statements which substantiate inferred conclusions.
Lit. C.	Reads and answers questions under timed conditions. States the main idea of a selection.
*Int. C.	Describes character traits; identifies and states the mood of a selection. (17)
Int. C.	Predicts the content of a selection from the introductory paragraph.
Int. C.	Identifies six kinds of propaganda techniques.
Eval.C.	Analyzes slanted writing by locating samples of biased reporting, insufficient or irrelevant information to support a case.
Lib. S.	Uses an encyclopedia to locate information and compares the results to another encyclopedia. Uses the unabridged dictionary to locate meanings, histories, and origins of words.
*Lib. S.	Identifies the purpose for using reference resources like the Reader's Guide, Library Catalogue, World Almanac, Atlas, Thesaurus. (29)

Ref. S.	Writes a research paper using reference books. (2)
*Ref. S.	Locates and compares information in a variety of periodicals. (21)
Org. S.	Condenses prose. Constructs an outline with 2 levels of indentation.

Level J

*Str. A.	Uses and defines words ending with the suffixes (-ance, -ence, -ic, -al, -dom, -ty, -ity, -ure, -ism, -th) and beginning with the prefixes (re-, con-, de-, ex-, pre-, pro-, ad-, ob-) uses and defines common Latin roots. (5, 6, 7)
*Voc. D.	Uses thesaurus to locate synonyms and antonyms.(8, 9)
Voc. D.	Chooses correct meanings for words in sentences where meaning is implied but not stated.
*Lit. C.	Answers questions requiring both recall of fact and inferential reasoning. (14)
Lit. C.	Writes and gives orally a book report.
*Int. C.	Identifies metaphor and words conveying the mood of the selection. (17)
Int. C.	Determines the emotional reaction of characters in particular situations.
*Int. C.	Identifies cause-and-effect in a selection where one or the other is implied but not stated. (16)
*Eval C.	Examines the validity of a written work. Identifies author's bias; states whether or not the evidence supports the conclusions. Classifies advertisements according to the type of propaganda. Chooses best headline for a given newspaper article. (18, 20, 22, 23)
*Lib. S.	Uses the World Almanac as a reference.
*Ref. S.	Uses the dictionary to find abbreviations, signs, symbols, proofreaders marks, biographical names, pronouncing gazeteer, forms of address. (26)
*Ref. S.	Compares the function and coverage of two or more magazines or newspapers. States preference. (19)
Ref. S.	Writes a research paper using 3 sources.
Org. S.	Organizes by taking notes, sequencing ideas, locating information that supports the main ideas, constructing an outline with three levels of indentation.

Level K

*Str. A.	Defines and uses words ending in -ant, -ent, -ive, -ic, -ary. Defines basic Latin and Greek roots as used in context. (5, 7)
Voc. D.	Answers questions based on a technical selection.
*Voc. D.	Uses source books to locate origins and histories of words. (13)
Lit. C.	Determines whether given questions can be answered by a given selection.
*Lit. C.	Writes or gives orally book reports. Included are biographies and autobiographies. (15)
Int. C.	Identifies and describes poetry according to the devices that establish mood. Identifies examples of personification.
Eval C.	Compares techniques and viewpoints of different authors. Evaluates conclusions on basis of evidence.
*Ref. S.	Locates pronunciation, definition, and derivation of words in a dictionary. (25)

*Ref S. Writes a research paper using 4 references, makes outline, takes notes, prepares bibliography. (24)

Org. S. Demonstrates the ability to organize information by constructing a paragraph based on informational statements, taking notes from an oral presentation, constructing an outline with three levels of indentation.

12-8

COMMUNICATION SKILLS **

Writing

1. Writes original paragraphs consisting of grammatically correct sentences and appropriate conventions of punctuation.

1.01 Controls movement of hands and individual fingers.
1.02 Grasps well with hands and fingers.
1.03 Coordinates use of two hands in a task.
1.04 Controls use of fingers in drawing, painting, and cutting.
1.05 Controls use of fingers in tracing or copying letters and numbers.
1.06 Picks up small objects with fingers.
1.07 Coordinates eyes and hands in aligning objects, pouring liquids, fastening, locking, threading, and lacing.
1.08 Coordinates eyes and hands in using tools such as hammer, stapler, rotary beater, sandpaper.
1.09 Writes in manuscript all upper and lower case letters on primary paper.
1.10 Writes full name in manuscript from memory.
1.11 Locates and types all letters on a typewriter.
1.12 Labels in manuscript simple familiar objects, where words exist in reading vocabulary.
1.13 Prints numbers from 1 to 10 from memory.
1.14 Writes yes or no in response to oral questions.
1.15 Writes missing word or words in sentences which use the reading vocabulary.
1.16 Writes letters when dictated for words up to 6 letters - no spelling involved.
1.17 Copies simple sentences in manuscript with regard to capitals and punctuation.
1.18 Writes in complete sentences of two or more words to express action in a picture.
1.19 Places period, question mark, or exclamation point at the end of appropriate sentences that use reading vocabulary.
1.20 Begins all sentences with capital letters.
1.21 Writes in manuscript or cursive a paragraph of two or more sentences about himself.
1.22 Writes own name in cursive from memory.
1.23 Writes in cursive or manuscript between two lines.
1.24 Writes in manuscript or cursive, a friendly letter or at least one paragraph.
1.25 Writes in simple, compound, and complex sentences with regard to punctuation.
*1.26 Writes at least two original paragraphs on a familiar topic with grammatically correct sentences and appropriate punctuation.
1.27 Uses adverbs and adjectives when describing characters, places, and feelings.
1.28 Writes a 500-word report from an outline. (see Intermediate objective Reading, Level K,
1.29 Writes legibly in cursive. Reference Skills)
1.30 Records a conversation using appropriate punctuation.
1.31 Reviews or rewrites the work of another author.

2. Spells ninety-eight percent (98%) of words used in original sentences correctly as the result of mastery of basic words in frequent use, phonetic principles, or use of a dictionary.

2.01 Identifies as words letters grouped to form words.
2.02 Names all letters of the alphabet.
2.03 Identifies 2 rhyming words where three words are given orally (ball, tall, dig).
2.04 Identifies words that begin with the same sound when three words are given orally (mat, man, pig).

2.05 Identifies words that end with the same sounds when words are presented orally.
2.06 Spells own name orally.
2.07 Matches his words with correct spellings to identify errors.
2.08 Says a word which rhymes with a word said by adult or another child.
2.09 Names the vowels.
2.10 Hears and names regular long and short vowels at the beginning or middle of a word.
2.11 Lists words belonging to common word families such as at: cat, hat, fat, sat.
2.12 Spells Dolch sight words with 80 percent accuracy.
2.13 Gives orally the letters of the alphabet in order from memory.
2.14 Finds words in simple picture dictionary according to the first letter in the word.
2.15 Counts the number of syllables in a word up to two syllables given orally.
2.16 Spells correctly in writing his name, days, months, numbers, street of school and residence, city, state, school names, family names.
2.17 Applies rules for adding endings -s, -ed, -ing, -es, -ly, -ness, -ment, -ship, -ion.
2.18 Marks silent vowels and consonants in words in reading vocabulary.
2.19 Alphabetizes names, titles, compound words.
2.20 Locates words in a standard dictionary by first, second, and third letters of the word.
2.21 Lists orally four ways in which a dictionary can serve him.
2.22 Alphabetizes words using up to eight letters (international, internal).
2.23 Locates any word in speaking vocabulary in the dictionary using the guide words.
*2.24 Spells 98 percent of words correctly in original sentences as the result of mastery of words in frequent use, phonetic principles, or use of the dictionary.
2.25 Applies rules for adding endings -able, -ible, -ful, -ous, -less, -en, -ize, -ify, -ate, -ance, -ence, -dom, -ism, -ty, -ity.
2.26 Syllabifies words of 3 or more syllables
2.27 Chooses correct spellings of homonyms, when context is known.

3. Gives directions, orally or in writing, to other students which the other students successfully execute. The directions are to be for a task which can be completed in 10 minutes, can be completed without cost to the students or school, and for which all subtasks included are in the repertoire of learnings of students who are to complete the task.

3.01 Follows simple directions from a series of not more than three pictures.
3.02 Follows footprints, arrows, or color code.
3.03 Leaves path for another child to follow.
3.04 Follows directions from a series of 3 to 6 pictures.
3.05 Follows one word printed directions (go, stop, cut, color).
3.06 Follows footprints, arrows, color code, number code, or letter code.
3.07 Creates and leaves a path for another child to follow.
3.08 Shows another child how to perform a task he has learned.
3.09 Follows directions from a series of 6 to 10 pictures.
3.10 Follows one sentence printed directions.
3.11 Follows a series of directions in simple vocabulary.
3.12 Reads signs that direct him from place to place (Go to the art room. Come see me).
3.13 Makes signs to direct another student around the room (Hang up your coat. Take a pen).
*3.14 Demonstrates a task having several steps for another child.
3.15 Follows directions in a manual or workbook which includes diagrams and writing.

3.16 Follows directions for a day's work by moving from step to step.
3.17 Describes in writing the operation of a machine or the performance of a task.
3.18 Writes directions with at least 6 parts for another child. Evaluates self on basis of other child's performance.

4. Types 30 words a minute with a maximum of two errors.

4.01 Explores with typewriter to discover letter keys, number keys, return button, spacing button, and carriage for paper.
4.02 Names lower case letters and numbers that he strikes.
4.03 Responds to the command to type a letter (Type a "c", strikes "c").
4.04 Types upper and lower cases of all letters.
4.05 Types by copying, names and simple words with regard to capitalization.
4.06 Copies simple sentences with regard to capitals and punctuation.
4.07 Types sentences with accurate positioning of fingers.
4.08 Types with a steady rhythm.
4.09 Types 20 words/minute with a maximum of 2 errors.
4.10 Types with correct paragraph formation and sentence structure.
4.11 Types a business letter. May copy.
4.12 Types with steady rhythm and proper finger positioning and posture.
*4.13 Types 30 words/minute with a maximum of 2 errors.
4.14 Types a two-page paper with correct placement of title and page numbers.
4.15 Types a title page and a bibliography.

5. Judges student's own writing for selected criteria such as clarity, expression of a mood, and brevity, and revises selections judged to be deficient according to the selected criteria. Reviews revised version.

5.01 Listens to a story he has dictated and evaluates it as to proper sequence of events, brevity, clarity, interest level.
5.02 Writes a simple paragraph and examines it on the basis of how well the sentences relate, clarity, and interest level.
5.03 Dictates a story, listens to it, then judges it on basis of brevity, clarity, mood, etc.
5.04 Makes corrections and revises a story he has dictated.
5.05 Writes an original story or report.
*5.06 Judges his story on the basis of clarity, mood, brevity, character descriptions, regard to significant detail, etc.
*5.07 Revises own story to correct weaknesses.
*5.08 Reviews a revised version.

6. Judges the writing of an unidentified author for selected criteria such as clarity, expression of a mood, and brevity, and revises selections judged to be deficient according to the selected criteria.

6.01 Listens to simple rhymes and short stories. Chooses ones he likes best.
6.02 Listens to a variety of stories or poems and chooses the ones he likes best.
6.03 Retells stories he has heard.
6.04 Says what he likes or dislikes about a story.
6.05 Responds to a story by drawing a character, scene, or expressing a mood from that story.

6.06 Reads a story and answers simple questions orally or in writing.(How did the story make you feel?)
6.07 Reads a story or article and selects the title he thinks most appropriate from a list of four.
6.08 Writes a paragraph critically reviewing an author's work.
*6.09 Writes or delivers orally a critical review of another author's work basing the judgment on clarity, expression of mood, brevity, etc.
*6.10 Revises an author's work by writing suggested changes.
6.11 Devises a checklist upon which to judge an author's work.

Listening

7. Listens to a talk of up to 30 minutes and paraphrases, orally or in writing, two points that the speaker made.

7.01 Listens to a story of about 5 minutes in length.
7.02 Answers simple questions orally. (Who was the story about?)
7.03 Listens to a story up to fifteen minutes in length.
7.04 Answers simple questions orally in complete sentences.
7.05 Retells a short story in proper sequence.
7.06 Listens to a ten to twenty minute story or talk.
7.07 Answers simple questions orally or in writing.
7.08 Retells the major events of the story in the proper sequence.
*7.09 Listens to a talk of up to thirty minutes in length.
7.10 Answers questions about the talk orally or in writing.
*7.11 Paraphrases orally or in writing what a speaker has said in a 30 minute talk, stating at least two main points.
7.12 Summarizes orally or in writing both sides of a debate after listening to the debate.

8. Hears and executes 4 related, dependent, sequential, meaningful operations extending over at least 10 minutes when both the language and the operations are known to be in the student's repertoire; student may write down the directions if he chooses.

8.01 Executes a command requiring one operation where language and required operation are familiar.
8.02 Repeats a simple sentence he hears.
8.03 Reproduces a pattern of beats by tapping (six taps).
8.04 Hears and executes two related, sequential, meaningful operations extending over 5 minutes where language and required operations are familiar.
8.05 Repeats immediately a set of instructions containing up to four parts.
8.06 Reproduces a pattern of beats by tapping (eight taps).
8.07 Hears and executes two related dependent, sequential, meaningful operations extending over 10 minutes where language and required operations are familiar.
8.08 Hears and executes four related, dependent, sequential, meaningful operations extending over 5 minutes where language and required operations are familiar.
8.09 Records in writing a set of four instructions using familiar vocabulary.
*8.10 Hears and executes four related, dependent, sequential, meaningful operations extending over at least 10 minutes where language and required operations are familiar; may write down directions.

9. Listens to and relays a meaningful message when the content and language used in the message are known to be within the student's repertoire. Time delay of not more than five minutes.

9.01 Repeats a simple sentence he hears.

9.02 Repeats a one-operation instruction for another child within one minute after hearing.

9.03 Listens to a message having up to three main parts (content and language are familiar) and relays the message within five minutes.

*9.04 Listens to and relays a meaningful message when the content and language used in the message are known to be within the student's repertoire. Time delay of not more than five minutes.

Speaking

10. Uses the phone to gather information on selected topics: finds the correct phone number, places the call, follows socially effective procedures for requesting information, and obtains clarification of information that may not be clear.

10.01 Uses play phone in conversation with another child (says hello, asks who he is speaking to, says goodbye).

10.02 Uses phone to call home or friend whose number he has. Dials phone, asks for party.

10.03 Uses phone to call home, friend, or business establishment for specific information (e.g. time, address). Locates number in a phone book or through information, dials, follows socially effective procedures.

10.04 Repeats up to four pieces of information gathered.

*10.05 Uses the phone to call home, friends or business establishment to gather information on selected topics: finds correct phone number, places call, follows socially effective procedures for requesting information, obtains clarification of information that is not clear.

10.06 Records or repeats information that he has gathered.

11. Leads discussion among five students: focuses on the main topic, listens to ideas of others, summarizes main points, sees that all participants are included, and brings the discussion to a satisfactory conclusion. The criterion of success may be the leader's own satisfaction with all elements of the discussion given above, consensus of discussion members that the leader included all elements of the discussion listed above, or consensus of an audience (class of students, for instance) that the leader included all elements of the discussion listed above.

11.01 Reads to or shares something with a group. Asks questions of them. Listens to their answers.

11.02 Contributes to a discussion led by another student. States a disagreement.

11.03 Summarizes up to four main points of a discussion which he has witnessed among 2-4 other students.
11.04 Evaluates the discussion in terms of the group's ability to stick to the topic and accomplish the purpose of discussion.
11.05 Leads discussion among five students: focuses on main idea, listens to others, draws others into the discussion.
11.06 Summarizes and evaluates a discussion.
11.07 Contributes to and evaluates a discussion led by another student.
11.08 Identifies and states problems or areas not covered in a discussion.
11.09 Identifies and describes biases of speakers.

12. Negotiates with adults and/or students to obtain agreement on a topic or planned activity.

12.01 Asks to borrow a toy or game from teacher or another student.
12.02 Allows another student to use materials he is not using.
12.03 Asks to borrow materials. Returns them when finished.
12.04 Lends own materials to another student.
12.05 Shares materials and works together with another child for 15 minutes.
12.06 Plans a presentation, game, or project. Locates and obtains materials, space, and help from others.
12.07 Participates in a group discussion to plan a group activity.
12.08 Evaluates alternatives and listens to the evaluation of others on a given question.
12.09 Plans an activity and presents it to an adult or student group.
12.10 Listens to and discusses ideas and suggestions of others.
*12.11 Negotiates with the adult or student to obtain agreement on the final plan or topic.
12.12 Proposes alternative plans and conducts a discussion to select one.

13. Prepares a questionnaire on a specific topic and uses it to conduct a 15 minute interview with an adult (a local businessman, community leader, school teacher) employing the following procedures: Makes an appointment for the interview, identifies himself at start of interview, states purpose of the interview, asks questions and records responses of interviewee, brings interview to close, thanks interviewee for cooperation, reports orally or in writing the results of the interview.

13.01 Questions another child about what he is doing; listens to the answer.
13.02 Formulates alone or with a group, a series of questions to ask a guest speaker.
13.03 Introduces self and friends to new acquaintances.
13.04 Notes on a checklist and summarizes the remarks made by a guest speaker.
13.05 Role plays a five to ten minute interview: makes appointment, identifies self, states purpose, asks questions, records answers, closes interview, thanks interviewee, reports back.
*13.06 Chooses a topic and prepares a questionnaire to use in a 15-minute interview on the topic.
*13.07 Selects an interviewee, makes appointment, identifies self, states purpose, asks questions and records responses, closes interview and thanks interviewee.
*13.08 Reports orally or in writing the results.
13.09 Participates in a role-playing situation as the person being interviewed by another student or an adult.

Observing

14. Draws a scene or makes a diagram which is recognizable at a later date to the student or to others, as a method of recording an observation.

14.01 Records a simple observation by dressing a "weather doll" or charting own height.

14.02 Using a real model, records by drawing the mercury on a thermometer, hands on a clock, clothes on a "weather doll," leaves on a tree, etc.

14.03 Identifies a drawing or photograph of a familiar scene.

14.04 Recognizes major changes in the classroom arrangement.

14.05 Draws his house, self, school, or pet, etc., and explains how it differs from the recorded observations of another child who observes and draws his house, etc. (That is or is not my house because....)

14.06 Records data periodically on a chart or graph.

14.07 Observes and records an observation by drawing and compares observation with that of another child (cells in a microscope, veins in a leaf, shadows).

14.08 Explains a simple chart or graph to another child or to a group.

*14.09 Draws a simple floor plan or a map of familiar scene so that another child can recognize and identify it at a later date.

14.10 Draws a scene or diagram from memory that is recognizable by students to whom it is familiar.

14.11 From a diagram, compares observation to actual place observed.

14.12 To a basic diagram of a familiar object or location, adds details he recalls from memory.

15. From a group of pictures or diagrams representing an event or scene familiar to the student, selects those pictures which can be accepted as an accurate expression of reality and explains why these pictorial representations are acceptable and others are not.

15.01 Identifies familiar people or places from photographs.

15.02 On a drawing, marks what is missing or incorrect.

15.03 Identifies and classifies pictures (places to live, people that serve our community, etc.)

15.04 Removes pictures that do not belong in a classification and says why.

*15.05 From a series of pictures, points to unrealistic event or action and explains choice. (barefeet in the snow).

*15.06 From a diagram of the school or class, selects one most nearly like the real thing. Identifies flaws in the unacceptable diagrams.

16. From a group of pictures or diagrams representing an event not familiar to the student, selects the picture which can be accepted as probably accurate expression of reality. States a gross inference upon which the student decided to accept the picture or diagram as probably accurate.
probably accurate.

*16.01 From a group of pictures, selects the ones most likely to be accurate for an unfamiliar situation. (Selects the animals who are adapted for life in the water, etc.).

*16.02 From a diagram, chooses the one most useful for a given function (space ship, truck, baseball glove, etc.).

16.03 Makes corrections in diagrams of familiar events or scenes.

Observing: 17. From a series of film clips that relate an event witnessed by the student, selects the one which factually documents the event.

17.01 Identifies films of places or events that are the same as or similar to places or events he has experienced.
17.02 From a series of film clips of familiar places, identifies things that are new or changed or previously forgotten.
17.03 From a series of film clips chooses the one that is "most like I remember it".
17.04 Makes a film of an event. Compares it to another child's film of the same event. Third child will choose the one that best represents his view. Discusses results.
*17.05 From a series of film clips chooses one that best recalls his interpretation of the place or event. Says why.
17.06 Views two or more examples of film reporting of the same event. Explains the bias of the photographer.

Observing: 18. From a series of pictures, still or motion, makes inferences about the emotions represented in the pictures.

18.01 Classifies a series of pictures of faces with happy or sad expressions, according to the appropriate category.
18.02 Identifies characters in a book or on film that are happy, sad, angry, embarrassed, afraid, excited.
18.03 Identifies characters in a book or on film that are happy, sad, embarrassed, angry, afraid, excited. Explains how he arrived at the decision.
18.04 Views motion films and describes emotional content of physical movements of characters.
18.05 Views a motion film; and lists the forms of the non-verbal communications he sees.
18.06 From a series of pictures, still or motion, states emotions represented and makes inferences about why the character is reacting in such a way.

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* Terminal, required objectives.

** A number of objectives grouped under communication skills, social studies and art forms require the student to state preferences. For these objectives the criterion measure is simply that the student discuss or state his preference. No score or grade will be given for the response.

Mathematics Abbreviations

Num.	Numeration
Add.	Addition
Sub.	Subtraction
Frs.	Fractions
P. V.	Place Value
Mon.	Money
Time	Time
Som.	Systems of Measurement
Geom.	Geometry
S. T.	Special Topics
Com.	Combination of Processes

MATHEMATICS

Level A

Num.	Counts, reads, and writes numbers 1 to 10 in sequence.
Num.	Identifies and constructs sets. Matches equivalent and nonequivalent sets.
Add.& Sub.	Illustrates simple addition through manipulation of objects; combines objects from two sets.
Frs.	Responds to terms and identifies whole and half of object or set of objects.

Level B

Num.	Reads words for numbers 0 to 10. Counts, reads, writes numbers 1 to 100. Counts by 10's to 100. Responds to ordinals to 10th.
Num.	Selects greatest and smallest numbers from group of 3 numbers . Places > or < between only 2 numbers 0 to 100.
P. V.	Places digits in tens and ones places for any number 1 to 100.
Add & Sub.	Solves addition and subtraction problems with objects, numbers, and words to sums of 12.
Frs.	Identifies and divides in half an object or set of objects up to 12.
*Mon.	Recognizes and matches numerical value of penny, nickel, dime. Recognizes quarter. Finds values of groups of coins to 12¢ using ¢ sign. (18)
Time	Reads and writes numerals on a clock face. Places long hand "before" and "after" the hour.
Som.	Identifies inches on ruler and uses terms "ruler," "yardstick," "dozen," and "one-half."
Geom.	Identifies and reproduces a circle, square, triangle, and rectangle.

Level C

Num.	Counts, reads, writes numbers to 200. Counts by twos, fives, and tens to 200. Identifies numbers as odd or even.
P. V.	Identifies place value of numbers to 200 in written or expanded form. Places > or < between 2 numbers to 200.
Add.	Does column addition with sums to 20 (no carrying). Places >, <, or = between 2 addition expressions.
Add.	Demonstrates associative principle for addition using parentheses.
Sub.	Subtracts without borrowing all sums to 18. Places >, <, = between subtraction expressions.
Frs.	Divides a whole into halves, thirds, fourths.
*Mon.	Matches numerical value of quarter. Adds coins to 99¢. Uses $ and . (decimal). (18)
Time	Counts hour and minute marks on clock or number line.
*Som.	Measures in inches and feet (3), cups, pints, quarts.
Geom.	Identifies and names solids: sphere, cylinder, cube, cone, and rectangle.
S. T.	Writes Roman numbers 1 to 30.

Level D

Num.	Counts, reads, writes numbers to 1000. Counts by 3's, 4's. Converts decimals to fractions and to written terms.
P. V.	Identifies place value to 1000's and to hundredths for decimals. Regroups. Writes numbers and decimals in expanded notation.
Add.	Adds with regrouping to hundreds; sums to 2000.
Sub.	Subtracts by borrowing from 100's and 10's.
Mult.	Multiplies with factors 2-5 by repeated addition. Demonstrates commutative principle.
Div.	Divides by numbers to 5. Uses multiplication to check problems.
Frs.	Identifies parts of objects by 1/6, 1/8, 2/3, 3/4. Adds two fractions with same denominator.
*Mon.	Identifies half dollar and dollar. Adds and subtracts with sums to $1.00. Makes change. (18)
Time	Reads printed time and draws it on a clock face.
*Som.	Identifies 1 yard = 3 feet = 36 inches. Measures to 1/4". Uses equivalent liquid measures. (28)
Geom.	Identifies solids. Names line segments.
S. T.	Writes Roman numerals to 100. Reads thermometer, bar graph.

Level E

*Num.	Counts, reads, writes numbers to 1,000,000. Writes numerals to 4 places and decimal fractions to 4 places in words. Converts decimals to fractions. Orders pure and mixed decimals to 100.001. (1, 2, 3)
*P. V.	Identifies place value digits to 1,000,000; and decimals to thousandths. (6, 7)
*Add.	Adds with carrying to 4 places; decimals to hundredths. Solves multiple-step word problems. (8, 14).
*Sub.	Subtracts by borrowing to 4 places; decimals to hundredths. Solves multiple-step word problems. (9, 14)
Mult.	Uses repeated addition for 1 digit x 3 digit numbers. Uses commutative, associative, distributive principles.
*Mult.	Finds squares of numbers 1-10; uses exponential form; uses algorithms for multiplication by 10's to 1,000,000. Solves word problems. (14)
Div.	Divides with remainder using 1 digit factor, 2 digit products. Solves word problems.
Frs.	Uses and names all common fractions. Adds and subtracts with like denominators. Reduces to lowest terms.
Mon.	Totals amounts to $10.00 and makes change.
*Time	Reads and writes time by a clock. Identifies time by parts of days (morning, etc.) days in weeks, months. Solves calendar problems. (23, 24)
*Time	Identifies and reads seconds on a clock. Reads time schedules. Adds and subtracts with time using regrouping. (25)
*Som.	Solves problems using tons, pounds, ounces, speed (d = st), centigrade and Fahrenheit thermometers, feet, rods, yards, miles. Measures centimeters. (28, 29, 30)

Geom.	Names and identifies points, line segments, right angles, intersecting lines, parallels, perpendicular.
*S. T.	Writes Roman numerals to 500. Reads distances from maps; reads and makes graphs and charts. (39, 40)
*Com.	Solves equations using N. Finds averages to 1000. Selects principle that describes an equation and vice versa. (16)

Level F

*Num.	Rounds numbers up to millions. Locates primes to 100. Writes 5 place numbers in words. (4, 5)
P. V.	Writes numbers as powers of ten and in exponential form to 9^2. Reads and charts decimals to millionths.
Add.	Adds whole number and decimals to millionths with carrying.
Sub.	Subtracts with decimals to millionths.
*Mult.	Multiplies 3 digits x 3 or more digits to 1,000,000. Multiplies 2 decimal numbers. (10)
*Div.	Uses algorithms to divide with 2-or 3-place factors. Writes remainders as fractions. Divides decimal by whole numbers. Uses fractional notation. Solves 2-step word problems. (13, 14)
Frs.	Identifies proper and improper fractions. Adds, subtracts, multiplies simple improper and mixed fractions with unlike denominators. Finds LCD, LCM.
Frs.	Orders fractions using $>$, $<$, $\neq$, $=$. Writes decimal equivalents. Solves one-step word problems.
*Mon.	Multiplies and divides money values. Solves multiple-step word problems. (14)
*Time	Adds and subtracts with times beyond 12:00. Reads a 24-hour clock. (19) Solves problems on time zones and daylight savings time. Identifies decade, fortnight, score, century. (20, 21, 22)
Som.	Converts measures. Uses metric stick.
*Geom.	Finds perimeters, areas. Identifies plane figures. Locates circle parts, ray, vertex of triangle. Converts square units. Measures to nearest 1/16 inch. (31, 32, 34)
*S. T.	Finds ratios and proportions. Completes number patterns. Makes graphs and charts with fractions and decimals. Converts fractions and decimals to percent. (35, 36, 37, 38)
Com.	Solves 2-step word problems with fractions, money, time, measurement.

Level G

Num.	Finds prime factors of any number. Identifies, writes, converts base 5 numbers. Locates and illustrates use of negative numbers. Writes numbers in exponential notation.
P. V.	Makes place value charts for base 5 and 10 systems and for decimals with positive exponents.
Add.	Adds negative and positive numbers. Adds any 2 numbers which are multiplied by same base to same positive power.
Sub.	Subtracts negative numbers and numbers in exponential form.

*Mult.	Multiplies numbers in exponential form. Multiplies 2 decimal numbers with decimals to thousandths. (10)
*Div.	Divides numbers with decimals to thousandths. Divides numbers in exponential form where bases are same. Annexes zeros to divide. Writes quotient as mixed numbers. (11, 12).
Frs.	Writes fractional equivalents of decimals. Multiplies and divides fractions. Solves multiple step word problems.
Time	Names very small, very large units. Solves word problems.
*Som.	Weighs in grams, kilograms. Converts metric to English. Converts acres, miles feet. (26, 27)
*Geom.	Identifies plane figures; finds perimeters and measures angles. Uses formulas to find circumference, area, and perimeters. (33)
*S. T.	Graphs coordinate pairs. Diagrams set intersection. Solves algebraic equations with one unknown. (17)
*Com.	Finds percent of whole number. (15)

Level H

Num.	Identifies, adds, and subtracts in bases 2, 3, 8. Uses commutative and associative principles for adding in base 5. Solves 1-step word problems in base 5.
P. V.	Makes place value charts in bases 2, 3, 8.
Add.	Adds and subtracts positive and negative numbers without number line. Adds numbers with decimals parts to 1000 or more.
Sub.	Subtracts with numbers in exponential form with same base (2-10) to the same negative power.
Mult.	Multiplies positive and negative numbers. Multiplies numbers in exponential form with the same base, with positive and negative powers.
Div.	Divides positive and negative numbers written in exponential form. Finds square roots and cubes of whole numbers.
Frs.	Finds value of whole number raised to a fractional power.
Geom.	Finds surface area and volumes of solids. Finds congruents, parallels, transversals, perpendiculars.
Geom.	Uses Pythagorean theorem. Lists properties of plane and solid geometric figures.
S. T.	Identifies integers, rational, irrational numbers, sets which exhibit closure. Completes deductive statements. Makes comparative charts for U. S. and foreign currency.
Com.	Solves insurance, bank, tax, stock problems.

SOCIAL STUDIES*

General Skills

12. Uses appropriate library resources, books and periodicals, reference guides, and informed persons to locate information on a given topic.

12.01 Given a textbook locates the pages of a chapter on a given topic using the table of contents (Reading E, Ref. S).

12.02 Given a chapter of a book at his present reading level and a factual question to answer based on the chapter, skim reads the material to find the answer. (Reading E-K, Lit. C.).

12.03 Finds the addresses of three businesses offering a particular service (e.g., TV repair) located in a given area, using the telephone book.

12.04 Given a topic for research, finds all references to it in an encyclopedia. (Reading G, Lib. S.)

12.05 Given a textbook and a particular topic, uses the index to locate the page numbers of information on that topic. (Reading G, Ref. S.)

12.06 Given the title and author, finds the call number of the book in the card catalogue and locates the book on the shelf within 10 minutes. (Reading H, Lib. S.)

12.07 In a newspaper locates the weather report, editorial page, and a classified advertisement for secretarial help. (Reading I, Ref. S.)

12.08 Using the World Almanac as a reference, finds a number of given facts. (Reading J, Lib. S.) For example:

Fish and game regulations in the District of Columbia
Loser of World Series in 1933
Song of the year receiving the Grammy Award
Largest urban area in the U. S.
Year Ghana became an independent Commonwealth nation

12.09 Given a series of questions, states who in the community could answer them (What is the daily rate for a semi-private hospital room at D. C. General? How does one join the brick-layers union?)

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*For a discussion of the organization of these objectives, see the terminal objectives in Social Studies.

13. Using information he has located, identifies the main ideas and supportive details communicated to him and answers related questions.

13.01 After seeing a film or filmstrip, states the main idea or ideas and two details to support each.

13.02 Given a photograph or illustration and a series of related questions, answers the questions correctly.

13.03 In a given paragraph, underlines the sentence that presents the main idea and states two details that support it. (Reading F-K, Lit. C. and Eval. C.)

13.04 After listening to a 30 minute oral presentation, states at least two main ideas or points and two details to support each. (Communications Skills 7.11)

13.05 Given a paragraph and several related questions, reads the paragraph and answers the questions correctly. (Reading F-K, Lit. C.)

13.06 After hearing a discussion by several participants, states the main points made by each speaker and lists points of agreement and points of disagreement among them. (Communications Skills 7.12 and 11.06 - 11.09.)

13.07 Given a picture of an interaction and a series of related statements, classifies each statement as a description, an inference, or a value judgment. (Reading H, Eval. C.)

13.08 Creates a brief questionnaire on a topic of his choice, administers it to a selected sample of his classmates, and tabulates the results.

13.09 Chooses a topic and prepares a questionnaire to guide his interviews of three people to obtain specific information about that topic. (Communications Skills 13.08.)

13.10 Given a story or article several paragraphs long, outlines the main ideas using Roman numerals, capital letters, and Arabic numerals. (Reading J, Org. S.)

13.11 Given a list of terms used in social studies and a list of definitions, pairs terms and definitions correctly to 90% proficiency (wants, culture, constitution, law).

13.12 From written and/or pictorial materials, creates a three-dimensional model based on the data. (E.g., makes a cross-section of an Egyptian pyramid or burial tomb, a model of a Pueblo village.) (Arts 2.16 and Science S. T. 4.)

13.13 Given a story or article several pages long, summarizes the material in one paragraph.

13.14 Gathers data on a topic of his choice as a participant-observer in his family or classroom, keeping notes for a week, and summarizing his findings.

14. Using information he has gathered and reviewed, evaluates the information on the basis of facts presented, relevancy of the information, author's purpose for writing, opinions and interpretations stated, and persuasive techniques.

14.01 Given a paragraph containing relevant and irrelevant information on a particular topic, identifies the irrelevant data. (Reading E, Lit. C.)

14.02 Given five titles and authors of books, identifies at least four correctly as primary or secondary accounts (e.g., Autobiography of Malcolm X; McCuchion, Story of a Free People; Smith, (ed.), Collected Letters of Abraham Lincoln; Sandburg, Lincoln: The Prairie Years).

14.03 Given 10 sentences, correctly designates at least seven as fact or opinion (e.g., "The U.S. is the sixth largest country in the world." "The U.S. has the best form of government in the world."). (Reading H, Eval. C.).

14.04 Given a series of reports and articles by witnesses and historians concerning one particular event, assesses the bias and competency of each author in terms of the author's purpose in preparing his account, the attitudes he expresses, and his connection to the event or situation. (Reading I-K, Eval. C.)

14.05 Given three paragraphs each on a different topic and a generalization from each, states whether the generalization is justified based on the information. (Reading H, Eval. C.)

14.06 Given an article containing inconsistencies or contradictory information, points out the internal conflicts.

14.07 Given two sources of data about the same event, compares the two accounts in terms of factual content, points out two instances of disagreement between the authors, and states which account he believes to be most reliable and why. (Reading J, Ref. S.)

15. Using information he has evaluated, analyzes the information by testing theories and hypotheses and makes generalizations drawn from specific data.

15.01 Given a series of charts or paragraphs on the same topic, makes a generalization from the data. (E.g., given paragraphs on life in Jamestown, Williamsburg, and Plymouth, and excerpts from William Penn's diary about the life of the early settlers, generalizes that life was a constant struggle for survival or that the Indians were generally friendly and helpful in the early days of settlement.)

15.02 Makes a hypothesis, tests it, and then states whether it was accurate or needs revision.

15.03 Given previously learned concepts and generalizations, applies them to new data (e.g., discusses in writing or orally the trip to the moon in terms of the concept of Western expansion and America's push toward a frontier).

15.04 Given a single-factor theory of causation for an historical phenomenon (e.g., immigration to the U.S. was caused by the desire for religious freedom), proposes several alternative causative factors and gives supporting evidence.

16. Using information he has evaluated, organizes and presents it and evaluates the effectiveness of his presentation.

16.01 Uses or participates in a role-playing situation to dramatize a social issue. (Arts 30.03.)

16.02 Prepares a bulletin board or other graphic display on a subject of his choice as a means of conveying information. Evaluates the effectiveness of his presentation by administering a brief test to his audience to determine how well the information was communicated and retained. (Arts 7.02.)

16.03 Writes a logically organized report on a topic of his choice which reflects preparation involving reading, investigation, and original thought. (Reading K, Ref. S.)

16.04 Prepares and organizes a 6 to 8 minute oral report on a topic of his choice, so that classmates can, when the report is finished, state the major points and a supportive detail for each. (Communications Skills 11.15.)

16.05 Given a controversial topic or a current social issue, examines several points of view and chooses one position and debates in class. (Communications Skills 12.13.)

16.06 After investigating a topic of his choice, makes a value judgment about it and explains or justifies his opinion (the U.S. should or should not have annexed Mexico; there should or should not be a dress code in the school).

16.07 Following reading about the investigation of a political, economical or social problem of his choice (e.g., low cost housing for the Northeast, where a subway should run in D. C.) produces a plan or proposal which includes a statement of the problem, sources investigated, and justification of the proposal.

17. Constructs and interprets graphically represented information.

17.01 Finds mean, mode, and median of two population samples to illustrate different uses for each statistical "average" (e.g., weight of all the boys in the class; allowance of all boys in the class). (Math E, Com.)

17.02 Given several different types of graphs (a bar graph, pictograph, circle, and line graph) and a statistical table, (Math F, S. T. and Science CO 7a-c)

a. identifies the graph which represents the tabularized data, and
b. puts the data into graph form using the other three types of graphs listed above.

17.03 Given a clearly misleading graph or chart (omission of zero on graph scale, changing size of graph symbols), identifies the misleading factors.

18. Uses compass points as reference for establishing relations between geographic locations.

18.01 Names the cardinal directions. (North, South, East, West.)

18.02 Given a compass, orients himself, and walks in a designated direction.

18.03 Given ten commonly known geographic locations, states the compass direction relative to his position for at least nine of them. For example:

Canada
New York
France
Florida
Hawaii
Mississippi River
The Capitol
The Rocky Mountains
Texas
Puerto Rico

18.04 Given a map, approximates north on the map with actual compass direction.

19. Given six commonly known geographic locations, puts them in order in terms of distance from his position. For example:

Vietnam
The White House
Baltimore
Pennsylvania
California
The Great Lakes

21.04 Given a roadmap of an unfamiliar area, uses the legend and scale to trace the shortest route between two given points using major highways.

21.05 Given a unlabeled political map of an unfamiliar continent, identifies the major political divisions (city, county, state, country, capital) using the key.

21.06 Given a map using dot symbols (e.g., distribution of cattle throughout the U.S.), states what each dot stands for and interprets the map (e.g., tells how many head of cattle there are in Colorado).

21.07 Given an isothermic map, identifies areas of similar temperature.

21.08 Given a physical map, states the elevation of one color area according to the legend.

21.09 Given a physical (color layer) map, identifies two areas of similar elevation.

21.10 Given an isometric map, identifies areas of similar elevation.

21.11 Given a large scale map and a small scale map locates area covered in large scale map on small scale map.

22. Uses lines of longitude and latitude to locate geographic areas and to establish relationships between them.

22.01 Given a globe, traces with his finger one line of longitude and one line of latitude.

22.02 Explains that all longitude lines meet at the North and South Pole.

22.03 Given a globe locates the prime meridan (meridan at Greenwich).

22.04 Defines longitude as extending from 180° east of the prime meridan (0°) to 180° west of the prime meridan.

22.05 Locates the equator, the Tropics of Capricorn and Cancer, the Arctic and Antarctic circles, and the poles on a globe.

22.06 Uses the zones of latitude to explain the position of the earth in relation to the sun at the time of the vernal equinox and the autumnal equinox.

22.07 Given a globe with a grid, correctly labels the latitude of the equator (0°) and the poles (90°).

22.08 Given a map or globe with a grid, locates on it correctly five pairs of coordinates (e.g., 54°N and 47°W). (Math G, S.T.)

22.09 Given a point on a globe containing a grid, states the position in degrees of latitude and longitude.

22.10 Given two specific points on a globe, measures the distance between them in degrees of longitude and latitude.

22.11 Given two specific points on a globe, estimates the mileage between them based on the distance in degrees.

22.12 Defines and locates the international date line.

22.13 Given a globe and a time and day for a specific location on the globe, can state the time and day for another designated location on the globe. (E.g., if it is 2 p.m. on Tuesday in New York, what time and day is it in Japan?)

23. Identifies and names map projections and indicates areas of greatest distortion.

23.01 Given several world maps of different projections and a list of the types of projections, identifies correctly three of the projections and states the advantage or primary use of each.

23.02 Given three world maps of different projections, points out on each the areas of major distortion.

24. Calculates the number of years between two given dates (e.g., 2550 B.C. to 1950 A.D.)

24.01 States the number of years in a decade and a century and the approximate number of years in a generation.

24.02 Explains the meaning of A.D. and B.C.

24.03 Given a year, correctly states which century it is in.

25. For the following events or time periods, gives the approximate duration of each and ranks them in terms of duration, longest to shortest:

Civil War
Prehistoric times
Westward expansion of the United States
Roman Empire dominated the world
Flight of Apollo 11 to moon
Voyage of Columbus to America

26. Constructs a time line of American history marking off centuries and places on it one event of his choice for each century.

27. Works independently, submits work for evaluation, and then accepts criticism and makes revisions.

27.01 Chooses a topic for examination, investigates the topic independently through reading, observing pictures, movies or filmstrips, and/or interviewing, and reports orally or in writing on his findings. (Social Studies 16.)

27.02 Copes effectively with criticism of a report he has written by rewriting or revising it with the criticism in mind. (Communication Skills 5.06 - 5.09.)

27.03 Pursues reading or other project in a room with other students without interrupting or disturbing their activity.

28. Participates in group discussions or activities, respecting the opinions of others, waiting his turn to speak, and promoting the goals of the group.

28.01 Observes a group of his peers working on a project noting the goals of the group and the roles played by each member.

28.02 In a formal class discussion, awaits recognition of the chairman before speaking.

28.03 To show awareness of others' feelings, pantomimes different feelings (include use of hands, eyes, mouth and whole body) to be identified by others and identifies feelings pantomimed by them.

28.04 As a discussion leader or chairman in a group shows respect for the opinions and feelings of all participants. (Social Studies 9.)

28.05 In a debate, waits until the other side has finished its presentation; does not interrupt the presentation of the opposing side.

28.06 In a debate, criticizes his opponent's ideas, rather than his personality (e.g., "I disagree with your opinion because...", not "that's a dumb thing to say").

28.07 Participates as an active member of a committee, accepting his share of responsibility without dominating. (Social Studies 3.)

28.08 As chairman of a committee gives all members an equal opportunity to participate, respects the opinions of each, keeps order but does not dictate to the group. (Social Studies 9.)

29. Is aware of his own characteristics, feelings, and values.

29.01 Describes at least four unique features about himself.

29.02 Lists the roles he plays as a member of the family, school, and community.

29.03 Compiles a scrapbook "All About Me" including in it information about himself, about his family and friends, and sections on topics such as: "The Most Important Things I Am", "The Most Important Things I Do", and "Things I Like, Fear, Hope to Do or Be."

29.04 Given a list of human emotions with space for "when I felt this way" and "why", keeps an "emotion" checklist for a week, recording the emotions he feels, and examining the circumstances or situation that produced the emotion.

29.05 Keeps a log of all the gestures he makes or observes others making and describes the meaning or feeling they express.

29.06 Lists all decisions he has made in one 24 hour period including choices of clothing, food, recreational activity, and use of money.

30. Recognizes differences among human beings, classifying the differences as permanent, temporary, or changing.

30.01 Given a list of differences between people, labels those that are hereditary and those that are not.

30.02 Lists the ways he is like other students and ways in which he is different from them, concluding "We're all alike in certain ways, and different in other ways."

30.03 Lists the groups to which he belongs and indicates:

a. which he will always be in (e.g., race, sex, family).
b. how he became a member.
c. how one should act as a member.

31. Distinguishes between friendly and unfriendly behavior as typically expressed by himself and others and lists possible causes for unfriendly behavior.

31.01 States or acts out five friendly actions and five unfriendly actions.

31.02 Participates in or views a role-playing situation demonstrating either friendly or unfriendly behavior and describes his perception of the action, what the behavior was intended to convey, and how the behavior was perceived.

31.03 Following a role-playing situation similar to the one described above, participates in a discussion to verify the meaning of the demonstrated behavior.

31.04 Given examples of unfriendly behavior in several situations, including "name calling", infers the possible cause or reason for the behavior in each situation (situations should demonstrate ambivalence, multiple loyalty, disappointment, frustration, ignorance and fear, imitation of others, embarrassment, unfulfilled expectations).

32. Demonstrates empathy and respect for others.

32.01 Dramatizes appropriate behavior in the following places: concert hall, museum, place of worship, a ball park, the movies, library, a park, swimming pool, so that other classmates can identify where student is and what he is doing.

32.02 In role-playing situation assumes three of the following roles, demonstrating a problem faced by each:

a policeman on a night squad-car patrol
the owner of a small grocery or novelty store in a city
a tourist to the U. S. who knows little English
a corporation vice-president

32.03 Names advantages and disadvantages (problems) of people of the following ages:

2 months
5 years
10 years
18 years
35 years
70 years

32.04 Teaches or tutors a younger child a skill or knowledge with patience and respect for other's feelings until he has mastered the material.

Knowledge

Globalism

33.
(G) Using a globe for the earth and a light bulb to represent the sun, demostrates and explains the effect of the rotation of the earth, the inclination of the earth, and the revolution of the earth around the sun.

34. (G) Identifies, locates, and explains the effects of major ocean currents or land bodies.

34.01 Names and locates the origins of major ocean currents on a map or globe.

34.02 Traces the flow of a single ocean current on a map, identifying the land bodies affected by it.

34.03 Given a list of major ocean currents and a globe or map, draws in two of them and states the effects of each on major land bodies.

Landforms

35. (G) On an unlabeled globe or map, identifies types of land forms and bodies of water.

35.01 Given an unlabeled physical map of an unfamiliar or hypothetical continent, identifies one example of the following landforms:

- plain
- hill
- mountain
- plateau
- valley
- island
- harbor
- isthmus
- peninsula

35.02 Given a map including an example of each of the major types of water bodies (ocean, sea, bay, strait, lake, river), labels each correctly.

Climate

36. (G, A) Identifies factors which influence temperature and precipitation, and describes how various types of climate influence human life in given regions.

36.01 Names three factors that influence the temperature of any given location.

36.02 Given a list of possible factors, chooses those that affect the amount of precipitation at any given location.

36.03 Given a physical map of a hypothetical continent, shows where the following will probably be: desert, tropical rain forest, tundra, temperate climate with abundant rainfall, and a temperate climate with moderate rainfall.

36.04 Lists three advantages and three disadvantages of the climate of a tropical rain forest in Africa to the people who live there.

36.05 Lists differences in two cultures which result from climate differences (housing in Mexico and Alaska; working hours in Greece and England).

36.06 Gives two examples of the effect of cultural values on agriculture and two examples of the effect of technology on agriculture in the United States and another culture with a similar climate.

37. (G, E) Identifies natural resources and products of a given area and explains how a culture or society is affected by natural resources or lack thereof.

37.01 Given the following lists of natural resources and agricultural products, states which are produced in the U. S., which are imported, and which are both produced and imported (80% correct).

coal
uranium
oil
tin
bauxite
rubber
gold
iron
copper
lumber

beef
hogs
wheat
rice
coffee
sugar
cotton
tobacco
tea
silk

37.02 Briefly explains how each of the following affect the soil of an area and gives an example:

basic rock
climate
vegetation

rivers that move soil
man's agricultural practices
erosion

37.03 Describes how the discovery of a natural resource in one area has changed the physical environment and way of life of many people in that area (e. g., how discovery of oil in Oklahoma affected Indians; effect of tin mines on Bolivian Indian).

Patterns of Diversity and Similarity

38. (G) Lists factors which determine regional divisions and identifies several regional groups based on each.

38.01 From a given list selects eight factors that help determine what area of a land mass is considered a region.

38.02 Given a map of a continent and atlases, divides that continent into agricultural and industrial regions and climatic/topographical regions.

Change

39. (G) Locates and identifies examples of biotic and technological changes in a given environment.

39.01 Using his own city, state, or region, names five physical and biotic changes in the geography of the area in the past million years, and eight man-made changes in the geography and environment, and gives an example of each.

39.02 Gives examples of man's application of technology to overcome two problems of topography and two problems of climate.

39.03 Predicts what would happen to the desert way of life if water were discovered.

Urbanization

40. (G, E, S, P) Describes regions of varied population density, identifying natural features and land use. Lists cause of, problems with, and results of urbanization.

40.01 List at least five factors that contribute to the emergence of a city (agricultural surplus, division of labor, market, transportation, government, literacy).

40.02 Given a map of a hypothetical country or continent, shades in where areas of dense and sparse population and location of major cities are most likely to be and justifies these inferences.

40.03 Explains what factors contributed to the growth of at least five of the following cities:

Ancient Babylon
Athens
Rome
London
Singapore
Pittsburgh
Cleveland
Chicago
Los Angeles

40.04 Given an atlas and an almanac, makes a chart or graph of the population growth of his city (Washington, D.C.) over the past 50 years and states the reasons for the growth.

40.05 Draws a picture or writes a composition describing "my neighborhood" in terms of natural features, land use, and people.

40.06 Makes a list of the advantages and disadvantages of living downtown in a big city, in the suburbs, on a farm, and in a small town.

40.07 States the factors that determine the price of land in the city and in a rural area.

40.08 Lists the major problems and considerations (physical, economic, political, and social) in planning one of the following:

a city transportation system
an urban neighborhood
a suburban neighborhood
a downtown shopping area
a large urban park

World History

41. (II, A) Identifies, describes briefly, and locates in time and place, several of the great cultures, states, or empires which have existed in recorded history.

41.01 On the time line below, places five of seven events correctly:

Beginning of life on earth	Man begins history	Birth of Christ	1000	1492	Present

The New Testament of Bible is recorded
Discovery of fire
Building of pyramids
America declares independence
Greece begins the practice of democracy
The Middle Ages
The Industrial Revolution

41.02 For at least five of the following ages and places, describes a "typical day in the life of a young man" including food, shelter, and clothing; daily activities; tools and artifacts; relations with family and community; religious or spiritual beliefs and practices:

a. a Paleolithic European forest-dweller
b. an ancient Egyptian scribe's apprentice

c. an Athenian free-man of the 5th century B. C.
d. a serf in the Middle Ages
e. a Chinese noble at the time of Confucious
f. a student artist in Florence in the Renaissance
g. a prince in the Court of Louis XIV
h. a young Inca, Mayan, or Aztec youth during the flowering period of those civilizations
i. an Arab camel herder under the Ottoman Turkish rulers
j. a young tribesman in the Ashanti or Songhai empire

41.03 Lists two major artistic, governmental, scientific, or technical contributions to later or other civilizations made by each of three of the following:

Egyptians
Ancient Greeks
Romans
Ancient Chinese

41.04 Based on classroom examination of the art, literature, science and technology, and way of life of one ancient civilization (Egyptian, Greek, Roman, Byzantine, Indian or Confucian China), states how much he feels man has "progressed" in the past several thousand years and justifies his opinion with at least three "facts".

42. (H) Names four wars in the history of mankind and compares and contrasts reasons for each.

43. (H) Compares and contrasts given characteristics of life in the U. S. with those of other nations or civilizations.

43.01 Compares and contrasts the reasons for and treatment of slaves in Ancient Egypt, Ancient Rome and Greece, the Arab civilization, and the United States.

43.02 Contrasts a Greek city-state with one of the American colonies and with the United States today regarding environmental problems and barriers, the meaning of citizenship, and the meaning of democracy.

Age of Exploration

44. (H, E, Psy) Selects one area discovered by explorers and describes the men involved, their reasons for exploration, and the technological innovations that made the adventure possible.

44.01 Names four new ideas or technological advances in the 14th and 15th centuries that made exploration of the world possible.

44.02 Given biographies of two explorers of the New World and two astronauts, makes a statement about the personal characteristics and qualities that make a man an explorer.

44.03 Given a number of statements describing social, political, and economic causes for exploration of new lands, states an example of each.

American History - General Chronology

45. (H) Sequences and identifies the correct century of ~~significant~~ events in American History.

45.01 Places the following events in correct chronological sequence:

Constitution of 1789
Bill of Rights
Emancipation Proclamation
Declaration of Independence
Articles of Confederation
Settlement of Jamestown
Exploration by Lewis and Clark
Exploration by De Soto, Cabot, Marquette
Northwest Ordinance

45.02 Places the following events in the correct century:

Establishment of Plymouth Colony
Revolutionary War
Freeing of the Slaves
Exploration by Cabot, Marquette, Ponce De Leon
World War II
The California Gold Rush

Colonial America, Independence and the Founding of our Government

46. (H, A, P, Psy) Describes the colonial period in terms of types of people who populated the New World, the leaders that evolved, and the reasons for revolution and the establishment of an independent nation.

46.01 Given a map of Colonial America:

a. shades or labels the major areas of settlement and/or colonization in the U. S. by each of the following groups:

French
English
Dutch
Spanish
Scottish
Africans

b. states at least one contemporary example of the influence of that culture in the area (e. g., continued use of French code of laws in New Orleans).

46.02 Explains why the colonists sought independence rather than remain British subjects.

46.03 Given six excerpts from the Declaration of Independence, the preamble to the Constitution, and the Bill of Rights, correctly identifies the source of five.

46.04 Describes the life of four of the following individuals at the time of the American Revolution in terms of home, food, customs, religion, recreation, education, and work:

Rural New Englander
Boston aristocrat
Pennsylvania farmer
Philadelphia blacksmith
Virginia aristocrat
South Carolinian slave

46.05 Given biographical data about the founders of the U. S. (e. g., Franklin, Washington, Paine, J. Adams, S. Adams, Jefferson, etc.):

a. states the major achievements or contributions of each of the early leaders.

b. makes a valid generalization about the characteristics of the early leaders of our country (e. g., rich, white, male, Protestant).

c. makes a valid generalization about the qualities of leadership and greatness (based on the given biographical data).

46.06 Given biographical material about early American leaders and current leaders (President, Vice-President, Speaker of the House, Chief Justice), generalizes about similarities and differences in the requirements and characteristics for political leadership.

46.07 States two reasons why the Constitution was written and three ways in which it was a unique document.

46.08 Briefly outlines the two major political positions of the early days of Independence as represented by Hamilton and Jefferson and gives examples of positions on two current political issues illustrating the continuation of each philosophy.

Westward Expansion

47. (H, G) Identifies major groups and their reasons for immigrating to America. Identifies major groups and their reasons for moving west.

47.01 States four reasons for immigration to the U. S.

47.02 Names eight immigrant groups to come to the U. S. and at least one contribution to American life and culture by individual members of at least five of the groups.

47.03 For each of the waves of westward immigration (across the Appalachians, into the Great Plains, and to the Pacific), explains:

a. who went and why (major groups and reasons).

b. what major barriers and hardships they faced (both environmental and cultural).

c. how they met and overcame the barriers.

d. how government policy helped and encouraged the movement.

47.04 Given a map, draws in and labels the major routes of the westward migrants (Appalachian trail, river valleys, Santa Fe and Oregon Trails).

Civil War and Reconstruction

48. (H, P, Psy) Selects what he considers to be major causes and effects of the Civil War in terms of significant events, groups, and personalities.

48.01 Given a list of statements, indicates those that describe major issues or reasons for the Civil War.

48.02 Given a list of statements, chooses those factors that enabled the North to win the Civil War.

48.03 Briefly describes three of the problems faced by the emancipated slaves.

48.04 Given a biography of a 19th century Negro American, states the problems he faced, how each was met and overcome, and his contribution to the Negro and to society in general.

48.05 Briefly states the provisions of the 13th, 14th, and 15th amendments.

48.06 Briefly states the government policy of Reconstruction and describes its effect on the South.

48.07 Given a biography of Abraham Lincoln, summarizes (describes) highlights of his life and career, explains (infers) the reasons for his central place in American History and mythology, and states (judges) his own reaction to the man and his role in history. (Social Studies 13.07.)

Government Policy

49. (H) Identifies significant causes and factors which have contributed to the rise of the United States to its position as a world power.

49.01 From the history of the United States, selects three incidents involving policies of the federal government, foreign or domestic, that the student feels were wrong and explains why.

49.02 Lists five reasons (cultural, economic, and/or political) for the U. S. interest in Africa, Latin America, or Asia.

49.03 Chooses one of the following and discusses it as the most significant influence on 20th century history:

Post Civil War immigrations
United States involvement in world affairs
Industrial Revolution and scientific advances
Unequal distribution of wealth among peoples and countries

Wants and Choices

50.
(E, P, A)

Given an individual or a family as a case study, identifies likely wants and needs and the choices that the individual or family must make.

50.01 Distinguishes between wants and needs.

50.02 Lists the necessities and luxuries wanted by himself at the present time, by his grandparents when they were his age, by another child of a contemporary culture less technologically advanced (e.g., Hausa child, Eskimo child), and by himself in 2001 (student as adult).

50.03 Given $X for the year as an allowance to pay for clothes, snacks, and recreation, makes a budget for his spending for the year.

50.04 Given $X to spend for the month, makes a budget for his family's expenses and purchases.

50.05 Illustrates that choices are determined by culture by drawing up a monthly budget for a hypothetical family from another culture with a money economy.

50.06 Given a written summary of the president's budget request for the current year, a) makes a circle graph showing the percent of the budget allotted to each of the major spending categories; b) makes up a budget with same total and justifies what he, if he were president, would allot to each.

Consumption

51.
(E)

Lists orally or in writing examples of economic consumption of goods and services.

51.01 Given a list of goods, distinguishes the durable from the non-durable goods.

51.02 Writes a story of what would happen if cars and/or clothes never wore out.

51.03 Keeps a log of all the goods and services he consumes or uses in a two day period.

Careers

52.
(E)

Explores occupational choices open to an individual and identifies training requirements for the occupation, availability of jobs in the field, salary levels.

52.01 Given a list of the jobs that parents of students have, lists the special skills, abilities, and training which are necessary for each.

52.02 Interviews five people who do different work that the student thinks he might like to do and from each person interviewed collects the following information:

the training required
the income (range for job category)
whether and why he likes his work
what tasks are performed —what is produced
the hours of work
the disadvantages of the job

Tabulates the information collected and ranks the jobs in order of preference based on new knowledge.

52.03 Makes plans to start a small business he feels is needed in the neighborhood including financial arrangements; necessary licenses and contracts; optimal location; initial expenses, equipment, supplies; kind and number of employees; potential customers; and lists potential problems and offers suggestions for overcoming them.

52.04 Given the following list of professions, ranks them in terms of income and then ranks them as he feels they should be paid, explaining the latter ranking:

television actor
doctor
policeman
auto mechanic
garbage collector
judge on district court
minister
poet
vice president of General Motors

52.05 Compiles a list of ten industries and professions which have grown into existence in the past twenty years.

52.06 Given a list of job titles, designates those where opportunities, salaries, and number of positions in the category are expanding faster than general population growth, those growing at about the same rate as population, and those which are not growing.

52.07 Compiles his own "personality profile", examining the following characteristics about himself as they relate to job demands:

indoor or outdoor work
physical activity or sedentary
individual, small group, large group
reading, writing, listening, talking
directing others or being directed
any other characteristics he can think of

Money

53. (E) States why money is used as a medium of exchange for goods and services. Identifies functions of checking and savings accounts. Explains the effects of inflation in terms of the value of a dollar.

53.01 Given a series of examples, designates those where money permits a transaction not possible with a barter system (e.g., farmer gets a pair of shoes; fisherman saves up to buy a boat).

53.02 Explains why he accepts money as payment for newspaper delivery, baby sitting,or other work he performs.

53.03 For any item the student chooses, costing more than $50:

a. prices the item in three different stores.
b. calculates the cost of a bank loan to cover cost of purchase if repaid in six months.
c. calculates the cost of charging the item and paying for it in six monthly installments.
d. ranks in ascending order the cost of the three methods of payment: cash, bank loan, credit.

53.04 Correctly fills out a bank check.

53.05 Given several statements, designates those which are true of a checking account, those true of a savings account, and those true of both.

53.06 Explains in terms of income, expenses, and profits how inflation affects a businessman who owns his own store and a family on welfare.

Production

54. (E, G, S, H) Identifies elements of production and technological and locational factors which influence production.

54.01 After visiting a school cafeteria or factory identifies examples illustrating the division of labor or specialization and the factors of production that go into making the lunch or product (labor, durable and non-durable capital goods, natural resources).

54.02 Given a chart or graph showing decreasing time needed to produce a manufactured object, describes what the chart shows (decrease in time to produce shirt over 200 years from x hours to x minutes), and briefly explains the reasons for the increase in productivity (more efficient division of labor and specialization, technology, more capital input, less labor).

54.03 Studies one basic product in our society (e.g., bread, shoes, houses, paper) tracing it from the raw materials through steps in production and distribution (marketing) to the consumer. Compares current production methods with those used 100 years ago and those used 2,000 years ago.

54.04 Chooses one natural resource (Potomac River, coal, water, iron ore) and using atlases or almanacs:

a. makes a bar graph showing the quantities used by the Indians, first settlers, in 1900, and today;
b. lists the major uses of the resource at each of the four times;
c. draws inferences about what will happen if growth pattern continues;
d. makes a proposal about how our society should use the resources now and in the future.

54.05 Chooses three of five given industries and explains why they are located where they are in terms of geography, factors of production, and transportation:

Steel - Pittsburgh
Wheat - Great Plains
Meat packing - Chicago, Omaha
Aircraft - S. California
Electronics - Massachusetts

54.06 Lists two advantages and two disadvantages of mass production (should include as an advantage: greater output at lower unit cost, and as a disadvantage: effect on man's sense of pride and relation to his work).

54.07 Arranges power sources in order of discovery or use and explains how each new source affected technology, production, and man's way of life:

- Electricity
- Steam
- Human strength
- Atomic energy
- Water power
- Wind power
- Animal power

Technology and Economic Development

55.
(E, S, H) Identifies land, labor, and capital goods required for production in given industries and businesses. Explains how technological change has altered the need for given types of land, labor, and capital goods.

55.01 To distinguish land, labor, and capital goods, plays "20 questions" using as categories land, labor, and capital instead of animal, vegetable, and mineral.

55.02 Given a biography of one of America's business moguls, describes how he got rich (saving, reinvesting in business, etc.).

55.03 Chooses a country that is not industrialized (or a state or region of the U. S., e.g., Mississippi or Appalachia), and using an atlas and other library references:

a. considers its geography, natural resources, transportation systems, current agriculture and industry, population and labor force, and major problems;

b. makes a plan for economic development including what industries he would build, which services, power sources, and forms of transportation he would develop and where, and with whom the country should attempt to trade;

c. visits the embassy of the chosen country and interviews the economic counselor to learn what plans the country does have for economic development.

55.04 Examines U. S. immigration law and policy in the 19th century and the current law and draws an inference about current manpower needs and supply.

55.05 Examines five major industries before and after automation, in terms of numbers and types of jobs.

55.06 Picks what he considers to be the twenty most important technological changes or inventions in a field of his choice, places them on a time line extending from prehistory to the present, examines the trend and rate of change, and makes a prediction about changes in the next thirty years.

Market

56. (E, H, G, S) Identifies the market for particular goods and services and lists various ways competing producers vie for the market yet keep profits at a maximum.

56.01 Matches the following:

Resource	Price for its Use
Land	Interest
Labor	Salaries, wages
Capital	Rent

56.02 For a product of his choice (soap, car, cereal) lists the companies that make that product, compares three different brands of the same product with regard to price, packaging, ease of use, good taste, and premiums offered, and states which brand he would buy and why.

56.03 Imagines he is the maker of a new product, makes up a product name, and prepares an advertisement for the product emphasizing factors other than price.

56.04 Goes to three food stores including a supermarket and a small neighborhood store, compares the price of two or three items, and states two reasons for price differences between the small store and the supermarket.

56.05 After looking in the classified section of a newspaper for ads for apartments of similar size (e.g., two bedroom apartments), lists factors that contribute to variation in rent from one apartment to another.

56.06 Picks a market center (New York, Chicago) and explains how geography influenced its growth as a market.

56.07 Pretends he is the manager of a store which has an abundant year round supply of a seasonal item (e.g., strawberries), and assuming his competitors have only the usual supply at the usual times, sets prices for the item for each month to get the most profit.

56.08 Makes a chart illustrating the business cycle.

56.09 From TV, radio, or newspaper, chooses what he considers to be three good ads, and from a list of propaganda techniques states which ones each ad uses.

56.10 Interviews the manager of a local co-op (Greenbelt Co-Op, Scan, or one of the neighborhood co-ops) to learn how the co-op works and how it can save consumers' money.

56.11 Participates in role playing a scene where a door-to-door salesman gives "hard sell" and the consumer responds with the "right" questions about such things as product performance and specifications, financing, and guarantees.

56.12 Makes a graph of the following data:

Demand for Steak

Price Per Pound	Pounds Bought per Week
$1.60	0
1.40	100
1.20	200
1.00	400
.80	450

Interprets the data by answering the following questions:

How many pounds would be bought at $1.40 per week?
At what price would most steak be bought?
If you were a butcher who got steak at 50¢ per pound, which of these prices would you sell at?
What would be your profit?

56.13 Names two items for which demand varies greatly with price, and two for which demand remains steady if price changes. Explains briefly how the price at which Farmer Jones will sell his wheat is determined (explains perfect competition).

Modified Market Economy

57. (E, P, G, H) Names and describes the goods, services, costs, and benefits derived from government participation in a market economy (modified market economy).

57.01 Lists eight goods or services produced by the government (mail, schools, fire protection).

57.02 Examines one local example of pollution (Chesapeake Bay, Potomac, or D. C. air) to determine:

- a. sources of pollution - type, quantity.
- b. effects of pollution on wild life, vegetation, humans.
- c. government laws regulating pollution.
- d. effectiveness of law and enforcement agencies.

Proposes two alternative ways of controlling or eliminating the pollution, discusses effects of the proposals on individual citizens, business, and others affected by regulation, and submits the proposal to local authorities for comment and response.

57.03 States orally, in writing, or through role-playing how government helps:

- a. elderly citizens getting medicare benefits.
- b. housewives seeking consumer protection with respect to advertising, labeling, and inspection.
- c. school systems receiving federal aid to education.

57.04 Lists the different types of taxes paid by his family in the past year and tells to whom they were paid (state, local, and federal levels).

57.05 Explains how people without children benefit from education provided by the government.

57.06 Explains what is meant by the term graduated income tax and why the man with more income sometimes does not pay more taxes.

57.07 Compares working conditions in mines or factories during the 19th century and now, lists the changes, and explains the reasons for them (viz., labor unions and government regulation).

57.08 Participates in role-playing a collective bargaining session between union leaders and employers.

57.09 Describes how government regulation affects two of the following:

Housing market
Farmer
Small businessman
Banker
Retired people

57.10 Lists three ways in which government regulation affects him and/or his family indirectly.

57.11 To illustrate the difference between planned economies and market economies compares the life and work of 1) Farmer Jones of Kansas who owns a 1000 acre wheat farm and Farmer Ivanov, a member of a collective farm in the Ukraine, and 2) president of International Harvester, a company in the U. S., and the director of a Chinese tractor factory.

General Forms of Government

58. (P) Describes general forms of government and gives examples of each.

58.01 Given a series of definitions, descriptions, or statements, correctly matches each with one of the following terms: monarchy, dictatorship, oligarchy, democracy.

58.02 States two advantages and two disadvantages for the citizens of a dictatorship, an oligarchy, and a democracy.

58.03 Gives two examples of a federal type of government and two examples of a unitary type of government.

58.04 Briefly states the difference between a pure democracy and a republic (representative government) and gives an advantage and a disadvantage of each type.

Comparative Government

59. (P, G, E, S) Given a list of types of governments and examples of each, identifies as true or false statements made about each.

59.01 Makes a list of the similarities and differences between the governing process of Ancient Greece or the Roman Republic and the United States.

59.02 Given a series of statements (e.g., "Society existing without a government", "People paid according to how much they do", "People paid according to how much they need"), indicates into which of the following categories each fits:

a. Marx and Engel's original concept of communism
b. Practiced in Russia today
c. Practiced in China today
d. Practiced in both Russia and China
e. True of none

59.03 Names two advantages and two disadvantages of living in the USSR as compared with the U. S.

59.04 Examines a military dictatorship of his choice in terms of why and how that regime came to power; the economic, political, geographical and social problems the country faces; the methods and policies of the regime; and the attitude of the citizens toward that government and toward "democracy".

American Governing Institutions

60. (P) Given a list of branches, institutions, and levels of government in the United States and a list of the responsibilities of each, matches the branch or level and the functions.

60.01 Names the two branches of Congress and contrasts them regarding basis of representation and term of office of members.

60.02 Names five powers specifically given to the Federal government by the Constitution.

60.03 Names three powers shared by Federal and state governments.

60.04 Given a situation described briefly, states whether it is a concern primarily of the legislative, executive, or judicial branch of the government.

60.05 Names at least five cabinet level departments and their principal duties.

60.06 Gives the names of the men currently holding office as president, vice president, and three cabinet posts.

60.07 Outlines the arguments for and against "Home Rule" for D. C. and states his own position on the issue.

60.08 Gives three examples of changes in our government process that were brought about by amendment and three examples of changes brought about by other means.

60.09 Given the Preamble to the Constitution, states the goals of our Founding Fathers, an example of laws or institutions designed to promote one goal and one example of a situation in which the law fails to achieve the goal. (E.g., to insure domestic tranquility there are laws and a system of government to maintain order. Order was disturbed by riots in Watts, Washington, D.C. and Chicago.)

Rights

61. (P, S, Psy) Lists and explains the rights guaranteed to every United States citizen.

61.01 Briefly explains what is meant by the Bill of Rights and its importance to American citizens.

61.02 Names four of the five freedoms guaranteed by the First Amendment and gives an example of what life might be like without each.

61.03 Names five rights guaranteed by the Bill of Rights to the person accused of a crime and what the consequences of denying each of them would be.

61.04 Explains why we have trial by jury and why decisions have to be unanimous.

61.05 Names three differences between the treatment of juveniles and adults accused of the same crime.

61.06 Describes the rights and privileges of U. S. citizenship and three ways to become a citizen.

Law

62. (P, S, Psy) Given a proposed law, debates its merits, the consequences of its adoption, and the means of enforcing it.

62.01 Proposes three laws he feels should be passed and states why he advocates each.

62.02 Evaluates three laws proposed by a classmate and states whether the proposals violate any rights (are constitutional). For one of the proposed laws states whether it is politically and socially feasible, which groups in society would be for and which against the law, and estimates the likelihood of Congress (or a state legislature) passing the proposed law.

62.03 Selects three laws (city, state, or federal) which he feels should be repealed and states why he opposes each.

62.04 Evaluates the repeal proposals of a classmate on the basis of inferences of what the consequences of abolishing each of the laws might be.

62.05 Given two situations (such as Schenck vs. U. S.) where individual freedom conflicts with public order or welfare, states the issues on both sides and makes a "decision" on the case (e.g., free speech versus incitement to riot). (Use situations which led to appeal before the Supreme Court.)

62.06 Chooses one example of government legislation of morality to examine government regulation of an individual's private life (e.g., regulation of gambling, prohibition of narcotics). Using whatever resources are necessary states: what the laws now are, what penalties of violation are, what the consequences of abolishing all regulation might be, and how he feels society should deal with the issue.

62.07 Chooses one law, states the intent of the legislators, studies how well the law is enforced and makes inferences as to why there is a gap between the real and the ideal (e.g., air pollution).

Policy: Influence, Decision Making (Power)

63. (P, S, Psy) Describes a decision making process as it is carried out by an individual (president) or by a democratic group (legislature).

63.01 Chooses a major decision he has made and examines it in terms of the problem, the choices open to him, the advisors whose opinions he sought, factors he weighed in making the decision, and possible consequences of each alternative. Examines the decision making process of a school group in the same terms and compares the two.

63.02 Makes a list of characteristics or qualities he feels a government leader should have to be elected, compares his list with those of two or three other students, and discusses the similarities and differences.

63.03 Given descriptive material or examples to observe, determines whether a group reached a decision

a. democratically or autocratically,
b. by considering alternatives, or
c. by rational or emotional arguments and discussion.

63.04 Given a series of situations, predicts what will occur if the authority figure is democratic, autocratic, laissez-faire. (E.g., brothers are fighting and father intervenes; a family is planning a vacation and each member has a different proposal.)

63.05 Given a series of interpersonal interactions as examples, labels the type of influence used in bringing about the behavior using the following list of categories: reward, threat, authority, expertise, identity.

63.06 With the above list of categories, makes up an example of each to illustrate pressures on a legislator or Congressman.

63.07 Makes a chart (using government manuals and other references) showing five Federal regulatory agencies (FAA, AEC) and how each is supposed to protect the public welfare (viz., what each regulates and does).

Public Opinion

64. (P) From a series of examples of newspaper articles, identifies the slant or bias of the writer.

64.01 Given three articles from different newspapers reporting on the same event, but with clearly different opinions on the issue, points out the different interpretations of the same facts, stating what facts all agree on, which facts each chooses to omit or include, and what values or assumptions underlie each article.

64.02 Writes three brief news articles one favorable, one neutral, and one negative, all based on the same event, so that another student can identify the "slant."

Political Parties/Organizations

65. (P) From a list of policies and persons, identifies the party likely to be associated with each and say why (list must be limited to a specific period in U.S. history).

65.01 Given party literature and a number of news articles and statements by officials, examines the positions on a specific issue (e.g., busing students to achieve school integration) of the Republican and Democratic parties locally and nationally. Makes a generalization based on material about position of each party (if there is one) and unity or lack of it in each party.

65.02 Interviews a local political party official to learn term of office, salary, duties, and how he got the position.

65.03 At election time, picks a pair of opposing candidates to study. Using news media accounts and campaign literature, compares and contrasts the candidates in terms of background, education, and position on three campaign issues. States a preference for one man and explains his choice.

Interest Groups

66.
(P)
Given a list of interest groups, identifies issues in which they are likely to be involved, and their means of exerting pressures on policy makers.

66.01 Picks a current public political issue, makes a list of legitimate ways a citizen can influence the government to act on that issue, and acts in at least one way to influence the outcome (e.g., writes a letter to Congressman, attends a citizens committee meeting).

66.02 Lists three local and five national pressure groups or lobbies and examines one of them in terms of predominating characteristics of membership (socioeconomic, religious, racial, special interest), issues the organization is fighting for or against, tactics used to influence legislators and the public, and the degree of success.

66.03 Examines one "demonstration" (e.g., anti-war rally, Poor People's Campaign) in terms of goals, slogans, supporters, and effectiveness.

66.04 Follows a local city political issue (e.g., freeway dispute) in newspapers and other media, describes major issues (what each side is saying), the position of the local government officials, and Congressional involvement and then states his position on the issue and lists possible actions a concerned citizen might take.

Conflict

67.
(Psy, P, S, H)
In examples of individual, interpersonal, intergroup, or international conflict, identifies the possible reasons for the conflict and suggests alternative means of settling the dispute.

67.01 Role plays or otherwise describes three ways to resolve individual conflict (conflict within oneself).

67.02 Explains in writing or orally, the difference between individual conflict and conflict between individuals.

67.03 Explains in writing or orally, why conflict is greater in times of rapid or drastic change (social, economic, political, cultural).

67.04 Gives three examples of lack or failure of communication as a cause of conflict, including one example which illustrates the "generation gap."

67.05 Given two examples of inter-group conflict, outlines the positions of the opposing sides and proposes resolutions to each situation.

67.06 Names three special agencies of the United Nations and explains briefly the function of each.

67.07 Defines revolution and gives three examples.

67.08 Given a list of causes, indicates which were basic causes and which was the immediate cause of a particular revolution (student's choice).

67.09 Writes a story, poem, or essay or tells orally how he might have felt and what he might have done, in two of the following situations:

If I were a Parisian tailor in 1789.
If I were a Russian factory worker in 1917.
If I were a Chinese peasant in 1948.
If I were a black resident of Birmingham, Alabama in 1955.

Cultural Anthropology

68. (A, S) Compares his own life with descriptions of life in three other societies and identifies the features of those societies that are culturally like and unlike his own.

68.01 Shown five sets of pictures, each set containing five pictures, picks the two pictures in each set that illustrate the same culture correctly four times out of five.

68.02 Compares his own culture with one other in terms of tools and artifacts, social organization, and values and beliefs.

68.03 States orally or in writing four reasons why men began to live together in groups.

68.04 Names three reasons why people wear clothing and gives an example for each reason (e.g., shoes for protection, jewelry for decoration, bathing suit for modesty).

68.05 From a list of human activities, correctly chooses those items that are cultural universals (e.g., jokes and joking, eating habits, marriage rites).

68.06 For one of the culture groups studied, explains the relationships in that society between either food, shelter, or clothing and physical environment and economic organization.

68.07 Cites an instance of how he was led to reexamine his own attitude toward man through his study of another culture group.

68.08 Examines the culture of at least two American Indian tribes or African tribes. When asked to describe "The Redman" or Africans, states that the culture of each group varies widely, indicating the elimination of stereotyped thinking about these groups.

68.09 Creates a poem, essay, painting, or story to express what he believes man must do for future survival.

68.10 Given a world map with locations of major language groups or families of the world shaded in and a list of language groups, labels the shaded areas with the correct language group.

68.11 Given a world map with areas where major religions of the world predominate shaded in and a list of religions, labels the shaded areas with the correct religion.

Physical Anthropology

69. (A, G, Psy) Describes physical characteristics, needs, and adaptations to given environments made by both man and animals.

69.01 Explains what is meant by environment by describing his own environment at home and in the neighborhood in terms of climate, physical and topographical features, resources, and man-made additions to the natural environment.

69.02 Contrasts an animal behavior with a human behavior in terms of getting food, mating, and protecting the young.

69.03 From a list of items (e.g., intelligence, skin color, sense of humor, bone structure), picks those used by anthropologists to determine race.

69.04 From a given list (e.g., Bantu, Negroid, European, Chinese), chooses the three races of man as acknowledged by anthropologists.

69.05 Names five biological similarities between man and animals.

69.06 Names the important elements of human experience (parental care, group influence, need for affection, aggression).

69.07 Makes up a hypothetical animal adapted to a given hypothetical environment, and describes three changes that would evolve if this animal were placed in a different given environment.

69.08 Compares and contrasts the life cycles of an animal and a human in his own culture.

Archaeology and Evolution

70. (A) Lists and describes several stages in the evolution of man and of one plant or animal. Describes the role of the archaeologist in obtaining information about life in ancient and prehistoric times.

70.01 Given a list of objects, states which would not be found by an archaeologist when excavating the site of an ancient village (e.g., a clay pot, a metal knife, a woman's dress, a rubber ball, a toy airplane).

70.02 Explains three ways archaeologists determine the age of a fossil or an artifact.

70.03 Given a list of artifacts found in an archaeological "dig" and a series of statements, identifies those statements that are correct generalizations or inferences about the life, culture, and stage of development of the people as indicated by the artifacts.

70.04 Given a list of factors influencing organic evolution, explains and gives an example of mutation, natural selection, and isolation and migration.

70.05 Names the major differences (physical and cultural) between Homo australopithecus, Homo erectus, and Homo sapiens.

70.06 States the characteristics that distinguish man in the Paleolithic age from man in the Neolithic age.

Social Organization

71. (A, S, E) Compares and contrasts his own and two other cultures in terms of the family structure, group organization, unique customs, and the enculturation process in each.

71.01 Lists similarities and differences between the basic functions of the family among man and among animals.

71.02 Describes and gives two examples of an extended family and of a nuclear family.

71.03 Names and describes the characteristics of the major stages in the life cycle of Americans and people of at least one other culture.

71.04 Given a list of marriage customs and practices and a list of cultures, correctly matches the culture to the typical custom or customs.

71.05 Examines through observation, interviews, written materials, and films, two ethnic groups in America (preferably his own and one other) and compares them in terms of food and eating rules or habits; family organization; child rearing practices; special holidays, festivals, or heroes; and slang expressions, in chart form or by writing a play or essay.

71.06 Explains the various economic and social roles of each member of a family (grandfather, grandmother, father, mother, son, daughter) in contemporary America and in two other cultures.

71.07 Describes the process whereby political or group decisions are made in one of the simpler cultures he has studied.

71.08 Lists the ways American children learn their culture (are enculturated) and contrasts this to the enculturation process in at least one other culture.

Social Control

72. (A, S, P) Given his own or another culutre and a description of the laws dealing with treatment of criminals, marriage, ownership of property, or movement within and outside the borders, examines and describes the values in the culture that encourage or conflict with these laws.

72.01 Using an example from his own experience (transferring to a new school, joining the Scouts), explains how he learned the group norms and how the group sees to it that members follow the "rules".

72.02 Compares and contrasts the ways in which three societies deal with killing or theft by members of the society.

72.03 Gives two examples each of instances where a law or a judicial interpretation of a law has helped bring social change and where it has hindered it. (E.g., Civil Rights Act has speeded integration of public facilities and housing.)

72.04 Proposes a plan to reduce crime in his community or neighborhood.

72.05 Given a folktale or story, a work of art, and a song from another culture group and a song, story, and art work from his own culture, explains how each expresses the ideas, values, or needs of that culture.

72.06 After comparing the world's major religions, including his own, and the beliefs of several culture groups, states several ideas and beliefs and values that are shared by the majority of mankind.

72.07 Names three ways "rules" or laws come into being in America and in other societies.

Culture Change

73. (S, A) Selects and describes orally or in writing three daily practices and contrasts them to those of a nineteenth century resident of his region and to a contemporary resident of another cultural region. (E.g., bus rides, eating frozen foods, watching current news on television, shopping in a supermarket.)

73.01 By contrasting the life of a father (traditional) and his son (after the arrival of Western culture and influence), illustrates the changes in one society that he has studied in the areas of education, medicine and health, family relationships and roles, economic life and technology, and religious beliefs and practices.

73.02 Gives four examples of customs or beliefs, and four examples of tools or artifacts in Western culture that are the result of diffusion.

73.03 Examines the effect of one recent major invention or discovery on American culture (e.g., the airplane, car, TV).

73.04 Lists four factors that affect the rate of change in any culture.

73.05 Makes a family tree, conducts a survey, or creates or uses another method to illustrate social and geographic mobility in our society.

73.06 Writes a story about the discovery of a pill that would guarantee eternal life and explores the impact that adopting this pill would have on the society.

73.07 Selects a minority group in the United States, identifies notable members of the group and reports on contributions they have made to science, politics, the arts, or a field of the student's choice.

ARTS AND HUMANITIES

Visual Arts

1. Given a series of examples, identifies the basic media used in painting, drawing, sculpture, photography.

    1.01 From a series of printings and drawings, identifies the medium as ink, crayon, pencil, oil, water color, charcoal, or pastel.

    1.02 From a series of examples, identifies sculptures of clay, marble, stone, wire, metal.

    1.03 From a series of examples, identifies lithographs and etchings.

    1.04 From a series of examples, identifies photographs as stills, slides, film strips, films.

2. Given available media and materials, uses all of them at least once to express a variety of ideas or feelings.

    2.01 Uses finger paints, tempera, crayons, clay, scissors, paste, string and beads, construction paper as a means of expression.

    2.02 Uses pencil and paper, chalk, yarn, string, and glue as a means of expression.

    2.03 Uses pipe cleaners, needle and thread, charcoal, papier-mâché, soap and carving tool as a means of expression.

    2.04 Uses foam plastic, oils, plumbing pipe and solder, ink and pen, film and a camera, wood and knife, wire, linoleum block, and straw as a means of expression.

    2.05 Draws or paints in any medium from a model or from memory.

    2.06 Describes by drawing or painting, a daily life situation.

    2.07 Sculpts in any medium in order to examine three-dimensionality.

    2.08 Molds, fires, and paints a ceramic piece.

    2.09 Identifies primary colors, and creates studies in one, two, and three primary colors.

2.10 Identifies hues of the same color, and creates a study in many hues of one color.

2.11 Investigates colors and color combinations and works with a group of colors in any medium (paint, crayons, ink, chalk).

2.12 By mixing, produces shades (toward black) and tints (toward white) of a color and uses them to create a study.

2.13 Creates studies in black and white.

2.14 Creates studies in ranges of achromatic color (black, grey, or white).

2.15 Works with basic lines and shapes in two dimensions until a pattern is is designed (draw, paint, cut and paste with paper, string).

2.16 Works with lines and shapes in three dimensions until a structure is designed (blocks, wire, string, foam plastic, pipe cleaners).

2.17 Chooses a tool or medium and explores several uses of that tool or medium.

2.18 Sews an article of clothing.

2.19 Arranges and displays photographs he has taken of familiar scenes to convey a message (a photographic statement or essay).

2.20 Displays photographs he has taken which are artistically pleasing.

2.21 Makes a motion film.

2.22 Chooses a medium and expresses a single concept (hunger, excitement, fear).

2.23 Expresses one mood or feeling in three media.

2.24 Develops film he has taken.
2.25 Experiments with film developing techniques, then displays results.

3. Views the works (originals and reproductions) of professional artists, sculptors, photographers, and craftsmen.

4. Given a collection of works in the same medium, selects one to write about or discuss in terms of his reaction to it, the artist, the form, the historical period in which it was done, or a topic of his choice.

4.01 Selects a vocabulary in order to examine a painting, sculpture, or photograph (alone or with a group).

4.02 Visits and describes orally or in writing, outdoor sculptures in D.C. Includes in observation the medium, subject, artist, description of the setting.

4.03 Visits an art gallery and selects one or more works on which to report orally or in writing.

4.04 Collects some professional photographs, slides, or films which demonstrate various ways in which photography is used (e.g., commercial, decorative, artistic, documentary).

4.05 From a set of works of varying degrees of abstractness, explains what each communicates to him.

4.06 Selects an artist and reports on his life to the class using examples of his work.

5. Identifies various occupations involving art and explores the lives and training of artists and photographers by reading and/or interview.

6. Displays artistic works of his own.

6.01 Displays own art work in stage, school, and/or community exhibits.

6.02 Designs and displays a graphic representation (either asthetic or instructional) on a bulletin board, chalk board, or wall.

Music

7. Given a series of examples, identifies basic media (band, vocal) and the musical forms (jazz, opera) represented. Identifies individual instruments both by sight (picture or actual instrument) and sound.

7.01 Identifies recorded examples of musical forms such as symphony, opera, jazz, march, spiritual, popular music.

7.02 Identifies recorded examples of musical media — orchestra, band, solo, ensemble, vocal performances.

7.03 Identifies by sound the principal instruments of the four main musical families: strings, woodwinds, brass, and percussion (50% proficiency).

7.04 Identifies by sight the principal instruments of the four main musical families: strings, woodwinds, brass, and percussion.

8. Reproduces an unfamiliar melody vocally or instrumentally by sight reading.

    8.01 Given an unfamiliar melody in written form, sings or plays the melody after 15 minutes practice so it is recognizable by someone who knows the tune.

    8.02 Identifies and explains the symbols on a page of music (time, notes, staff, steps, rests, repeats).

9. Listens to a variety of performances by professional musicians, including at least one live performance.

    9.01 Listens to vocal and instrumental music on records.

    9.02 Attends a professional, live performance.

    9.03 Listens to the same note or notes played on different instruments and describes similarities and/or differences.

10. Given a series of recordings of a variety of musical forms, selects one to write about or discuss in terms of his reaction to it, facts about the composer, the form, the historical period in which it was written, or a topic of his choice.

    10.01 From a selection of ten recordings of instrumental music, selects one to discuss or write about in terms of his reaction to it, facts about the composer, the form, the historical period in which it was written, or a topic of his choice.

    10.02 Brings to class a favorite recording and says why he wanted the class to hear it.

    10.03 Compares two or more recordings of the same tune and states preference.

    10.04 From a selection of recordings, chooses tunes that are happy, sad, scary, silly, lively.

    10.05 Selects music to fit his mood and has another student identify the mood.

    10.06 From a list selects one instrument and traces its history through research.

    10.07 Chooses one musician or composer and reports on his life to the class using examples of his work.

11. Identifies various occupations involving music and explores the lives and training of musicians by reading and/or interview.

12. Sings or plays an instrument for an audience either alone or in a group.

    12.01 Participates in informal group singing.

    12.02 Reproduces a melody vocally that has been produced vocally or instrumentally.

    12.03 Learns a song with a group and presents it to an audience.

    12.04 Participates in an informal group performance with simple rhythm instruments.

    12.05 Explores several instruments including at least one example each of brass, woodwind, string, and percussion instruments by producing a range of sounds.

    12.06 Plays an instrument for an audience, alone or in a group.

Literature

13. Given a series of examples, identifies the basic forms of literature such as fable, myth, fairy tale, short story, play, novel, poem, nursery rhyme, jounalistic report, biography, autobiography, riddle.

14. Writes a creative work in any of the short forms.

    14.01 Dictates a story to an older student or adult or to a tape recorder.

    14.02 Writes a story or poem.

    14.03 Describes a scene in writing and compares it to a description of the same scene by another writer.

    14.04 Chooses a short story and adapts it to be presented as a play.

    14.05 Contributes an article, poem, or story to the school newspaper.

15. Listens to or reads the works of professional writers.

    15.01 Listens to stories and poems.

    15.02 Reads or listens to examples of fiction, nonfiction, biography, autobiography, poetry, essays, plays.

    15.03 Listens to a professional reading by an author or views a play, or dramatization of a literary work.

16. After reading or hearing several examples of literary works, selects one to write about or discuss in terms of his reaction to it, facts about the author, the form, the historical period in which it was written, or a topic of his choice.

    16.01 Reads aloud or retells from memory a favorite story.

    16.02 Reads several works for one form (poem, essay) and states preference.

    16.03 Chooses one literary form, traces its development, and cites outstanding examples from various periods in history.

    16.04 Reads a poem silently and hears it read aloud. States which he prefers and why.

    16.05 From a selected work, describes the author's purpose for writing, the mood, the main idea, and his own reaction.

    16.06 Describes orally or in writing or in a drawing some literary character he considers to be outstanding. Describes or represents personality traits.

    16.07 Discusses a dramatic production of a work he has read in terms of how it compares with his own interpretation.

    16.08 Reads selections from an essay, poem, story, or newspaper report, all of which deal with the same content and states what each communicates to him and which he prefers to read.

    16.09 Chooses one author, reads several of his works and reports on his life to the class.

17. Participates in a group to develop criteria for examining written work of his own and other students.

18. Identifies various occupations involving writing and explores the lives and training of writers by reading and/or interview.

19. Writes and reads aloud a poem, play, or short story for a group.

    19.01 In a group, learns and presents a choral reading or a play.

    19.02 Presents own writing to an audience.

Dance

20. Given a series of examples, identifies the basic forms of dance.

21. Uses the body to exercise and to express moods.

    21.01 Walks, steps, hops to the beat of a drum or musical selection.

    21.02 Given music (or sound of a kind) translates the sound into movements.

22. Views a variety of professional performances live or on film.

23. Views or participates in a variety of dances and selects one to write about or discuss in terms of his reaction to it, the choreography, the country and time of its origin, or a topic of his choice.

24. Given a series of examples of movements or dances, discusses each in terms of what mood or emotion it communicates to him.

    24.01 Observes two or more classmates interpreting music through movement and states which one most nearly represents his feeling in response to the music.

    24.02 Observes dance performed with and without music, and states what each communicates to him.

    24.03 From a series of dance steps of varying degrees of abstraction, explains what each communicates to him.

25. Explores the lives and training of professional dancers.

26. Presents a dance for an audience either alone or in a group.

Drama

27. Given a series of examples, identifies the basic forms of drama.

28. Uses voice, face, and body to express moods, ideas, or behaviors of a character, or directs another child or group in performing a part in a play.

    28.01 Uses body, face, and voice to convey a mood or feeling.

    28.02 Uses improvisation to "become" a tree, hunger, winter, lion, etc.

    28.03 Role plays alone or with classmates a particular open-ended situation and discusses with the class what happens.

28.04 Selects a play to perform. Chooses the director, costumes, set, sound, lighting, script. Assigns roles.

29. Views a variety of dramatic presentations including at least one live performance.

30. Given a variety of dramatic presentations to view or plays to read, selects one to write about or discuss in terms of his reaction to it, the playwright, the historical period in which it was written, or a topic of his choice.

30.01 Views two productions of the same play and compares them in terms of general impression, individual characterization, staging.

30.02 Views a play and identifies the purpose of the playwright, main characters, personality traits, and the ways in which these traits were conveyed.

30.03 Participates in a group to develop a checklist for discussing plays.

30.04 Reads newspaper reviews and selects a play he would like to attend.

31. Explores the lives and training of professional actors or playwrights.

32. Performs in a dramatic presentation or writes a work for others to perform.

32.01 Presents a reading alone or in a group.

32.02 Participates in presenting a puppet show to an audience.

32.03 Performs in a play before an audience.

32.04 Writes a play or adapts a play from another medium.

Architecture and Urban Studies

33. Identifies physical and social elements of the urban environment.

33.01 Identifies physical elements of the city (types of buildings, transportation, and communications network).

33.02 Identifies examples of the solids and voids of a city.

33.03 Identifies social elements of the city (neighborhood patterns, commercial, civic, racial, and housing concentrations).

34. Draws a floor plan or constructs a three dimensional model of a building.

  34.01 Alters interior of Fort Lincoln School to adapt a given space to a given activity.

  34.02 Draws a floor plan of a room.

  34.03 Constructs a model of a building or group of buildings.

  34.04 Designs a landscaping layout for a model of an architectural plan.

  34.05 Builds a wooden scale model of a building demonstrating simple construction concepts (a post supports a beam).

35. Views a variety of buildings and landscapes first hand or in pictures.

  35.01 Views pictures of famous buildings indicating unique architectural features.

  35.02 Tours D. C. and observes buildings, statues, memorials, landscaping.

  35.03 Views his home or the school from several angles.

  35.04 Views a building in process of construction at several stages and records each stage by film, diagram, and/or written description.

36. Views a variety of buildings and landscapes which are designed for similar functions and selects one to discuss in terms of the architect, material used, period when built, or a topic of his choice.

  36.01 Discusses likenesses and differences of selected buildings he has observed while touring D. C.

  36.02 Views and discusses a range of building exteriors.

  36.03 Views and discusses a range of building interiors.

  36.04 Views and identifies buildings as accent (impressive) or neutral (background).

  36.05 Given a set of floor plans, discusses the relationships of the rooms, proposes an appropriate use of the design and suggests at least two ways to utilize the space.

  36.06 Demonstrates the flexibility of the Fort Lincoln School as explained in the Utilization Manual.

37. Identifies various occupations involving architecture and explores the lives and training of architects by reading and/or interview.

38. Exhibits a floor plan or three dimensional layout that he has constructed.